ECOTRIB 2009 - 2nd European Conference on Tribology - Pisa, 7 - 10 June 2009

Building F, Engineering Faculty, University of Pisa

Programme

Day =>	Sunday 07-06-2009
Room =>	Hall
15,00 - 18,00	REGISTRATION and EXHIBITION PREPARATION

Monday 08-06-2009 — Session A

Time =>	Session =>	F1	F3	F5	F7	F9	Study Room	Hall
8,30 - 8,50							POSTER SESSION A	REGISTRATION - EXHIBITION
8,50 - 9,00								
9,00 - 9,40						OPENING		
9,40 - 10,20						INVITED LECTURE A		
10,20 - 10,50		COFFEE BREAK						
10,50 - 11,10	A-1	BT1-12	ET1-2	CT1-20	BM1-77			
11,10 - 11,30		BT1-49	ET1-3	CT1-29	BM1-62			
11,30 - 11,50		BT1-55	ET1-21	CT1-53	BM1-64			
11,50 - 12,10		BT1-67	ET1-24	CT1-84	BM1-117			
12,10 - 12,30		BT1-85		CT1-86	BM1-124			
12,30 - 14,00		LUNCH						
14,00 - 14,20	A-2	HE1-22	MD1-28	CT2-71	FW1-27			
14,20 - 14,40		HE1-102	MD1-56	CT2-127	FW1-30			
14,40 - 15,00		HE1-104	MD1-111	CT2-132	FW1-35			
15,00 - 15,20		HE1-108	MD1-140	CT2-137	FW1-54			
15,20 - 15,40			MD1-51	CT2-88	FW1-65			
15,40 - 16,10		COFFEE BREAK						
16,10 - 16,30	A-3	ME1-43	MT1-63	MA1-80	FW2-125	AIT Board		EXHIBITION
16,30 - 16,50		ME1-69	MT1-89	MA1-82	FW2-99			
16,50 - 17,10		ME1-90	MT1-161	MA1-194	FW2-105			
17,10 - 17,30		ME1-191	MT1-219		FW2-130			

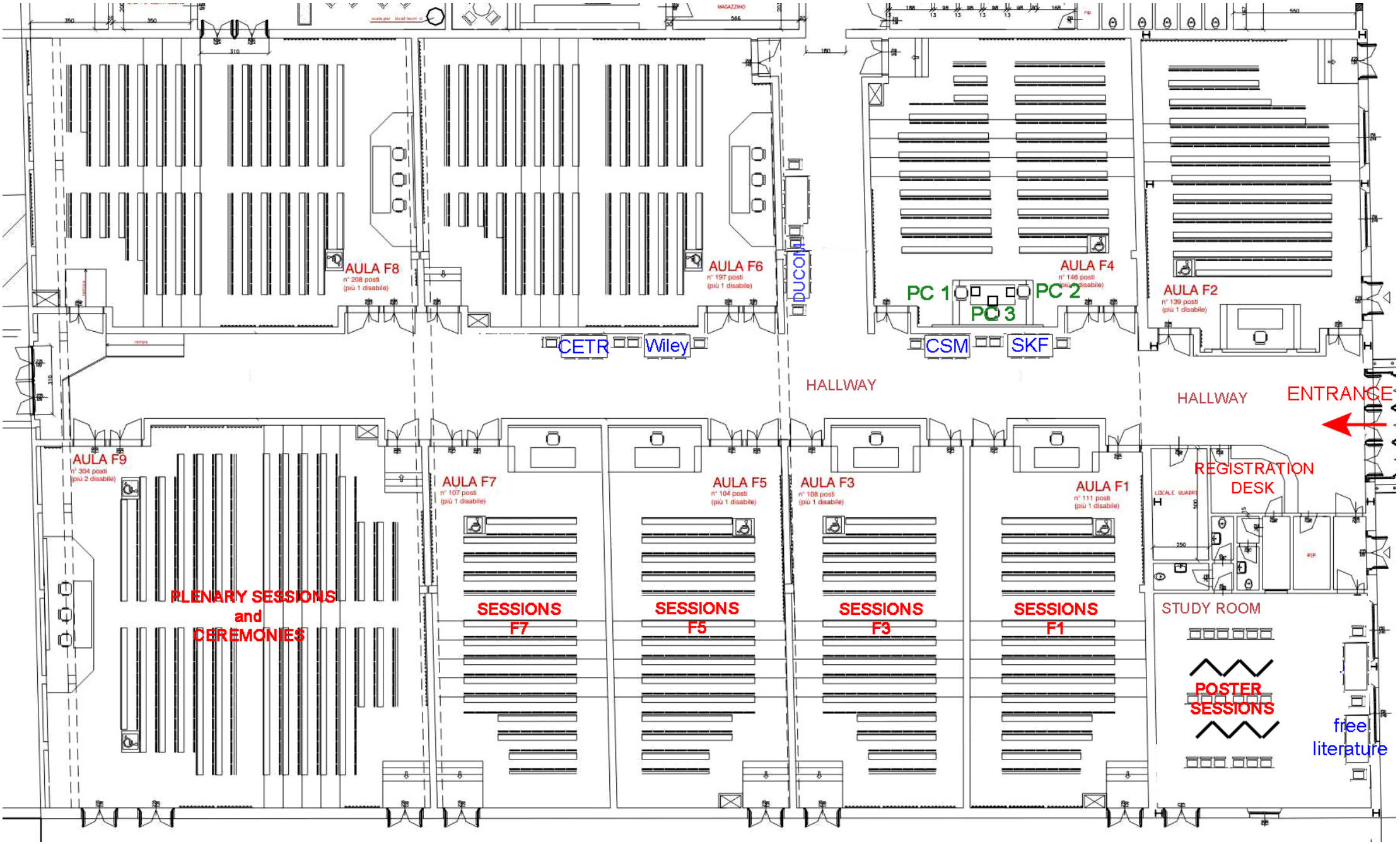
Tuesday 09-06-2009 — Session B

Time =>	Session =>	F1	F3	F5	F7	F9	Study Room	Hall
8,30 - 8,50							POSTER SESSION B	REGISTRATION - EXHIBITION
8,50 - 9,30						INVITED LECTURE B		
9,30 - 9,50	B-1	HE2-110	MD2-129	CT3-73	FW3-38			
9,50 - 10,10		HE2-136	MD2-142	CT3-146	FW3-171			
10,10 - 10,30		HE2-148	MD2-160	CT3-147	FW3-221			
10,30 - 11,00		COFFEE BREAK						
11,00 - 11,20	B-2	BT2-119	ET2-4	CT4-123	MN1-91			
11,20 - 11,40		BT2-95	ET2-70	CT4-149	MN1-45			
11,40 - 12,00		BT2-96	ET2-114	CT4-153	MN1-66			
12,00 - 12,20		BT2-167	ET2-78	CT4-164	MN1-100			
12,20 - 12,40		BT2-175		CT4-172	MN1-187			
12,40 - 14,00		LUNCH						
14,00 - 14,20	B-3	HS1-36	LA1-26	CM1-23	FW4-126			
14,20 - 14,40		HS1-186	LA1-32	CM1-37	FW4-206			
14,40 - 15,00		HS1-189	LA1-44	CM1-58	FW4-207			
15,00 - 15,20		HS1-220	LA1-74	CM1-112	FW4-138			
15,20 - 15,40		GM1-222		CM1-33	FW4-198			
15,40 - 16,10		COFFEE BREAK						
16,10 - 16,30	B-4	HE3-135	LA2-97	CM2-131	FW5-208			EXHIBITION
16,30 - 16,50		HE3-170	LA2-92	BT3-216	FW5-228			
16,50 - 17,10		HE3-183	LA2-201	BT3-218	FW5-223			
20,00 - 22,00		CONFERENCE DINNER						

Wednesday 10-06-2009 — Session C

Time =>	Session =>	F1	F3	F5	F7	F9	Study Room	Hall
8,30 - 8,50							POSTER SESSION C	REGISTRATION EXHIBITION
8,50 - 9,30						INVITED LECTURE C		
9,30 - 9,50	C-1	HE4-176	ET3-133	CM3-72	FW6-165			
9,50 - 10,10		HE4-214	ET3-168	CM3-173	FW6-180			
10,10 - 10,30			ET3-215	CM3-227	FW6-188			
10,30 - 11,00		COFFEE BREAK						
11,00 - 11,20	C-2	BT4-144	LA3-151	CT5-190	SYMPOSIUM Tribology "ART" vs "SCIENCE" Toward Thermodynamics Based Formulation of Tribo-systems			
11,20 - 11,40		BT4-193	LA3-169	CT5-182				
11,40 - 12,00		BT4-196	LA3-211	CT5-212				
12,00 - 12,20			LA3-226	CT5-217				
12,20 - 12,40						CLOSURE		
14,00 - 18,00		AIT General Meeting	WEME-SURF Meeting					

BT Biotribology	LA Lubricants and Additives	HS Hydrostatic Lubrication	CM Contact Mechanics	ME Tribology of Machine Elements
ET Ecotribology	BM Boundary and Mixed Lubrication	GM Gas and Magnetic Levitation	MN Micro and NanoTribology	MA Tribology in Manufacturing
CT Surface Coatings and Treatments	HE Hydrodynamics and Elastohydrodynamics	FW Friction and Wear	MD Maintenance, Monitoring and Diagnostics	MT Tribology of Materials


AULA F8
n° 208 posti
(più 1 disabile)
AULA F6
n° 197 posti
(più 1 disabile)
DUCOM
AULA F4
n° 146 posti
AULA F2
n° 139 posti
(più 1 disabile)
PC 1
PC 2
PC 3
CETR
Wiley
CSM
SKF
HALLWAY
HALLWAY
ENTRANCE
AULA F9
n° 304 posti
(più 2 disabile)
AULA F7
n° 107 posti
(più 1 disabile)
AULA F5
n° 104 posti
(più 1 disabile)
AULA F3
n° 108 posti
(più 1 disabile)
AULA F1
n° 111 posti
(più 1 disabile)
REGISTRATION
DESK
PLENARY SESSIONS
and
CEREMONIES
SESSIONS
F7
SESSIONS
F5
SESSIONS
F3
SESSIONS
F1
STUDY ROOM
POSTER
SESSIONS
free
literature

	Sunday, June 7th, 2009
Building F, Engineering Faculty, University of Pisa	**Hall**
15,00 – 18,00	REGISTRATION

	Monday, June 8th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F9**
SESSION A			
TIME	LABEL	AUTHORS	TITLE
8,50 – 9,40	OPENING E. Ciulli (Conference Chairman) M. Filippeschi (Mayor of Pisa) M. Pasquali (Rector of the University of Pisa) P. Terreni (Dean of the Engineering Faculty) M. Santochi (Head of Department of Mechanical, Nuclear and Production Engineering) R. Bassani (President of Italian Tribology Association) R. Crockett (President of Swiss Tribology) F. Franek (President of Austrian Tribology Society) J. Vižintin (President of Slovenian Society for Tribology)		
9,40 - 10,20	INVITED LECTURE A	N. D. Spencer	Understanding and Imitating Lubrication in Nature

	Monday, June 8th, 2009
Engineering Faculty, University of Pisa	**Building F or GARDEN**
10,20 – 10,50	COFFEE BREAK

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F1**

SESSION A1-BT1 (Biotribology)

Chairperson: Dr. P. Cann

TIME	LABEL	AUTHORS	TITLE
10,50 - 11,10	A1-BT1-12	G. Verberne, Y. Merkher, G. Halperin, A. Maroudas, I. Etsion	Techniques for Assessment of Wear Between Human Cartilage Surfaces
11,10 - 11,30	A1-BT1-49	M. Varenberg, S. N. Gorb	Biomimetic Surface Texture for Dry and Wet Friction
11,30 - 11,50	A1-BT1-55	E. Buselli, V. Pensabene, P. Castrataro, P. Valdastri, A. Menciassi, P. Dario	Micro Hairs for Friction Enhancement in Active Capsular Endoscopy
11,50 - 12,10	A1-BT1-67	M. Zavalloni, M. Spinelli, S. Carmignato, S. Affatato, M. Viceconti	Multivariable Approach for Wear Evaluation on Long Term Hip Implants Retrievals: Preliminary Results
12,10 - 12,30	A1-BT1-85	L. Skedung, M. Rutland, K. Danerlöv, U. Olofsson, M. Aikala, K. Niemi, J. Kettle	Tactile Perception - Finger Friction of Printing Papers

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F3**

SESSION A1-ET1 (Ecotribology)

Chairperson: Prof. F. Franek

TIME	LABEL	AUTHORS	TITLE
10,50 - 11,10	A1-ET1-2	W. J. Bartz	ECOTRIBOLOGY: Environmentally Acceptable Tribological Practices
11,10 - 11,30	A1-ET1-3	W. J. Bartz	The European „Marguerite“ for Environmentally Acceptable Lubricants
11,30 - 11,50	A1-ET1-21	F. Sorge, M. Cammalleri	An Efficient Damping Technique for the Unstable Hysteretic Rotor Whirl by Proper Suspension Systems
11,50 - 12,10	A1-ET1-24	J. Wahlström, A. Söderberg, L. Olander, A. Jansson, U. Olofsson	A Pin-on-Disc Simulation of Airborne Wear Particles from Disc Brakes

Monday, June 8th, 2009	
Building F, Engineering Faculty, University of Pisa	**Room F5**

SESSION A1-CT1 (Surface Coatings and Treatments)
Chairperson: Prof. J. Vižintin

TIME	LABEL	AUTHORS	TITLE
10,50 - 11,10	A1-CT1-20	B. Szeptycka, J. Senatorski	The Tribological Properties of the Nanocomposite Ni-SiC Coatings
11,10 - 11,30	A1-CT1-29	F. Zhou, B. Yue, K. Adachi, K. Kato	Friction and Wear Properties of Amorphous Carbon Nitride Coatings Sliding Against Silicon Carbide Balls in Water-Ethanol and Water-Glycol Mixtures
11,30 - 11,50	A1-CT1-53	K. Kumari, M. Bellacci, M. Giannozzi	Effects of Microstructure on Abrasive Wear Behavior of Thermally Sprayed WC-10% Co-4% Cr Coatings
11,50 - 12,10	A1-CT1-84	A. Diem, T. Hanisch, S. Klien, C. H. Surberg	Model Test of an Aluminium Cold Forming Tool or How Aluminium Can Destroy Hardened Steel
12,10 - 12,30	A1-CT1-86	E. Badisch, S. Sarkar, M. Roy, R. Mitra	High Temperature Impact Abrasive Wear Behaviour of Carbon-Based Composites

Monday, June 8th, 2009	
Building F, Engineering Faculty, University of Pisa	**Room F7**

SESSION A1-BM1 (Boundary and Mixed Lubrication)
Chairperson: Prof. N. D. Spencer

TIME	LABEL	AUTHORS	TITLE
10,50 - 11,10	A1-BM1-77	I. Krupka, M. Hartl, M. Vrbka, M. Vaverka, P. Svoboda, O. Samanek	Effect of Surface Texturing on Lubrication Film Formation Within Mixed Lubricated Contacts
11,10 - 11,30	A1-BM1-62	K. Laurijssen, T. Janssens, K. De Moerlooze, F. Al-Bender, H. Van Brussel	Modelling, Identification and Control of Wet Multi-Disk Clutches
11,30 - 11,50	A1-BM1-64	T. Janssens, F. Al-Bender, H. Van Brussel	Experimental Characterisation of Lubricated Friction: Lift-up and Stribeck Behaviour Considerations
11,50 - 12,10	A1-BM1-117	A. Karpinska, A. V. Olver, Q. Hao	The Effect of Anti-Wear Additives and Surface Roughness Layout on Running-in of Steel Surfaces
12,10 - 12,30	A1-BM1-124	I. Velkavrh, M. Kalin, J. Vižintin	Contributions to Friction in Boundary and Mixed Lubrication of DLC Coatings

	Monday, June 8th, 2009		
Building F, Engineering Faculty, University of Pisa			**STUDY Room**
POSTER SESSION A			
TIME	**LABEL**	**AUTHORS**	**TITLE**
8,50 - 14,00	A-LA-83	P. Ouyang, G. X. Chen, H. F. Li, L. T. Zhao	The Tribological Properties of (Quinazolin-4-Ones)-3-Methyl-Dibutyl Borate as a Novel Additive in Liquid Paraffin
	A-LA-155	V. Serra-Holm, M. Fathi-Najafi	Super-Heavy Naphthenics: an Alternative to Bright Stocks?
	A-BM-42	M. Borasso, C. Braccesi, M. C. Valigi	Undesired Acoustic Emission and Evaluation of the Actions in Mechanichal Face Seals
	A-HE-31	V. G. Marian, A. Predescu	Validity of Reynolds Equation in Case of an Infinitely Wide Rigid Cylinder Rotating Over a Grooved Surface
	A-HE-107	Z. M. Zhang, Q. An, W. J. Zhang, Q. Q. Yang, Y. J. Tang, X. B. Chen	Study of Directional Friction on the Fully Lubricated Surface with Regular Anisotropic Asperities
	A-GM-185	G. Belforte, F. Colombo, T. Raparelli, A. Trivella, V. Viktorov	Aerostatic Thrust Bearings: Experimental Comparison Between Different Feeding Solutions
	A-CM-11	D. Cohen, Y. Kligerman, I. Etsion	The Effect of Surface Roughness on Static Friction and Junction Growth of an Elastic-Plastic Spherical Contact
	A-CM-39	F. Al-Bender, K. De Moerlooze, H. Van Brussel	Characterization of Tractive Rolling Friction
	A-CM-181	F. Braghin, S. Bruni, E. Di Gialleonardo	Impact Loads due to Railway Wheel out-of-Roundness
	A-MA-15	M. S. Charoo, M. F. Wani, G. A. Harmain	Linear Regression Model to Predict Tool Wear on the Machining of GFRP
	A-ME-75	G. Belforte, M. Conte, L. Mazza	Accelerated Life Tests on Piston Seals for Pneumatic Cylinders
	A-ME-87	T. Lazovic, R. Mitrovic, A. Marinkovic	Influence of Abrasive Wear on the Ball Bearing Service Life
	A-ME-184	A. F. Fahim, Y. K. Younes, A. M. A. El-Butch, I. M. Ibrahim	A Study on Friction Dynamics of Tribological Systems with Flexible Joints
	A-ME-202	S. Strzelecki, S. M. Ghoneam	Dynamic Characteristics of Rotor Operating in Offset Halves Journal Bearings

	Monday, June 8th, 2009	
Engineering Faculty, University of Pisa		**Building F or GARDEN**
12,30 – 14,00	LUNCH	

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F1**

SESSION A2-HE1 (Hydrodynamics and Elastohydrodynamics)
Chairperson: Prof. J. Frêne

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	A2-HE1-22	G. Carbone, M. Scaraggi	EHL-Squeeze in High Loaded Contacts: the Case of Chain CVT Transmissions
14,20 - 14,40	A2-HE1-102	I. I. Kudish	Stable Numerical Solutions for Heavily Loaded Line EHL Contacts
14,40 - 15,00	A2-HE1-104	P. G. Nikolakopoulos, C. I. Papadopoulos, L. Kaiktsis	Pareto Optimization of Worn and Misaligned Journal Bearings Operating under Elastohydrodynamic Conditions
15,00 - 15,20	A2-HE1-108	Y. Meng, J. Zhang, H. Ogata	Squeeze Lubrication Mechanism of Textured Surfaces

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F3**

SESSION A2-MD1 (Maintenance, Monitoring and Diagnostics)
Chairperson: Prof. F. Sorge

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	A2-MD1-28	G. P. Adriani, A. Giannoni, M. Grassi	Conditions' Monitoring for Successful Maintenance Strategy at Ineos Plant in Rosignano
14,20 - 14,40	A2-MD1-56	G. Berti, F. De Marco	On Site X-Ray Diffraction a New NDT Technology for Diagnosis at the Nano-Scale
14,40 - 15,00	A2-MD1-111	K. Heidarbeigi, H. Ahmadi, M. Omid, A. Tabatabaeefar	Artificial Neural Network Design for Fault Identification in Massy Ferguson Tractor Gearbox
15,00 - 15,20	A2-MD1-140	V. D. Gonçalves, L. F. de Almeida, M. H. Mathias	Wear Particle Classifier System Based on an Artificial Neural Network
15,20 - 15,40	A2-MD1-51	L. Radovanovic, Z. Adamovic, D. Mihajlovic, D. Parabuca	The Resonance on Axial Fan

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F5**

SESSION A2-CT2 (Surface Coatings and Treatments)
Chairperson: Prof. M. Kalin

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	A2-CT2-71	J. Heinrichs, S. Jacobson	Laboratory Test Simulation of Aluminium Cold Forming – Influence from PVD Coatings on the Tool on the Tendency to Galling
14,40 - 15,00	A2-CT2-127	I. Velkavrh, L. Ožbolt, M. Kalin, J. Vižintin, J. Jelenc	The Adsorption of Polar Molecules on DLC Coatings
15,00 - 15,20	A2-CT2-132	L. M. Vilhena, M. Sedlaček, B. Podgornik, J. Vižintin, J. Možina	Influence of Texturing Parameters and Contact Size on Tribological Behaviour of Laser Textured Surfaces
15,20 - 15,40	A2-CT2-137	R. Michalczewski, M. Antonov, M. Vlad, M. Szczerek, I. Hussainova	The Assessment of the Coated Elements Behaviour Before and After Scuffing Under Four-Ball Lubricated Testing Conditions
14,20 - 14,40	A2-CT2-88	L. Carmignani, A. Dini, A. Sisi	The Valvetrain Elements Development Results in Twin Cylinder High Specific Power Engines for Motorcycle Application

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F7**

SESSION A2-FW1 (Friction and Wear)
Chairperson: Dr. H. A. Abdel-Aal

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	A2-FW1-27	M. Meozzi	On the Local Description of Wear-Induced Volume Loss and Shape Changes for Engineering Surfaces
14,20 - 14,40	A2-FW1-30	J. D. Biasoli de Mello	Ductile-to-Brittle Transition During Abrasive Wear Evaluated Using Multiple Interaction Simulations
14,40 - 15,00	A2-FW1-35	K. De Moerlooze, F. Al-Bender, H. Van Brussel	On the Relation Between Normal Load and Friction Force in Pre-Sliding, Frictional Contacts
15,00 - 15,20	A2-FW1-54	R. Merhej, J.-D. Béguin, J.-Y. Paris, J. Denape	Acoustic Emission for Investigations on Fretting Wear of Ceramic-Metal Contacts
15,20 - 15,40	A2-FW1-65	G. Belforte, A. M. Bertetto, L. Mazza, P. F. Orrù	Life Prediction of Guide Bearings for Linear Pneumatic Actuators

	Monday, June 8th, 2009
Engineering Faculty, University of Pisa	**Building F or GARDEN**
15,40 – 16,10	COFFEE BREAK

	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F1**

SESSION A3-ME1 (Tribology of Machine Elements)
Chairperson: Dr. A. Senatore

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	A3-ME1-43	R. F. Salant, B. Yang	Hydraulic Rod Seal With a Micro-Patterned Sealing Surface – Simulation Results
16,30 - 16,50	A3-ME1-69	B.-R. Hoehn, K. Michaelis, M. Hochmann	Grease Lubrication – Film Thickness in an EHD Contact
16,50 - 17,10	A3-ME1-90	F. Riddar, Å. Kassman Rudolphi, S. Hogmark	Wear Tests of Pneumatic Cylinders of Aluminium from Permanent Mould Casting and Extrusion
17,10 - 17,30	A3-ME1-191	A. Csobán, M. Kozma	Influence of the Oil Churning, the Bearing and the Tooth Friction Losses on the Efficiency of Planetary Gears

	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F3**

SESSION A3-MT1 (Tribology of Materials)
Chairperson: Prof. J. Suchanek

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	A3-MT1-63	M. Sebastiani, V. Mangione, F. Carassiti, E. Bemporad	Abrasive Wear of a Cobalt-Based Alloy - Stellite 6B; Investigation Based on Ion Probing Techniques
16,30 - 16,50	A3-MT1-89	M. Hadad, R. Hitzek, J. Michler, J. Lesage	Tribological Behaviour of Sandwich Structured WC-Co-Cr Thermally Sprayed Coatings
16,50 - 17,10	A3-MT1-161	H. Ahmadi	The Effects of Yttria Addition on Microstructure, Mechanical Properties, Wear and Corrosive Wear Resistance of TiNi Alloy
17,10 - 17,30	A3-MT1-219	Y. Sahin, S. Ozkan	Dry Wear Behaviour of SiCp/Al Alloy Composite

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F5**

SESSION A3-MA1 (Tribology in Manufacturing)
Chairperson: Prof. F. Zhou

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	A3-MA1-80	H. A. Abdel-Aal	Strength of Tribo-Induced Particle Emission from Mono-Crystalline Silicon Surfaces During Micro-Scratching with Diamond
16,30 - 16,50	A3-MA1-82	H. A. Abdel-Aal, M. El Mansori, M. Nouari, J. W. Ferguson	Wear of WC-Co Inserts in Dry High Speed Machining of Submicron Particle Size Aeronautical Grade Near β Titanium Alloy
16,50 - 17,10	A3-MA1-194	G. Petropoulos, N. Tsolakis, N. Vaxevanidis, A. Antoniadis	Topographic Description of Abrasive Waterjet Machined Surfaces

ECOTRIB 2009	Monday, June 8th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F7**

SESSION A3-FW2 (Friction and Wear)
Chairperson: Prof. J. D. Biasoli de Mello

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	A3-FW2-125	M. Kalin, I. Velkavrh, J. Vižintin	Tribo-Physical Parameters Influencing Lubricated Friction of DLC Coatings
16,30 - 16,50	A3-FW2-99	G. Ural, J.-Y. Paris, J. Denape, J.-D. Béguin, R. Merhej, J. G. Santanach, A. Webel, A. Peigney, C. Laurent, G. Chevallier, C. Estournes, Y. Paranthoen	Fretting Behavior of Alumina Nanocomposites Densified by SPS
16,50 - 17,10	A3-FW2-105	A. Polak, S. Oleksowicz	Modelling and Diagnostic of Operating Conditions of a Frictional Pair of Vehicle Disc Brake Using Chaos Theory Tools
17,10 - 17,30	A3-FW2-130	M. Sedlaček, B. Podgornik, J. Vižintin	Use of Roughness Parameters for Planning Surface Texturing

Tuesday, June 9th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F9**

SESSION B

TIME	LABEL	AUTHORS	TITLE
8,50 - 9,30	INVITED LECTURE B	G. Palombarini, L. Micele	Wear of Ceramic Composites: the SiC-$MoSi_2$ System

Tuesday, June 9th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F1**

SESSION B1-HE2 (Hydrodynamics and Elastohydrodynamics)

Chairperson: Prof. T. Raparelli

TIME	LABEL	AUTHORS	TITLE
9,30 - 9,50	B1-HE2-110	A. Shinkarenko, Y. Kligerman, I. Etsion	Partial Elastomer Texturing in Soft ElastoHydrodynamic Lubrication
9,50 - 10,10	B1-HE2-136	G. Adiletta, E. Mancusi, S. Strano	Unbalanced Rigid Rotor with Two-Lobe Wave Journal Bearings
10,10 - 10,30	B1-HE2-148	T. J. Park	Effect of Roller Axial Profile on the EHL of Finite Cylindrical Roller

Tuesday, June 9th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F3**

SESSION B1-MD2 (Maintenance, Monitoring and Diagnostics)

Chairperson: Prof. M. H. Mathias

TIME	LABEL	AUTHORS	TITLE
9,30 - 9,50	B1-MD2-129	A. Urevc, J. Vižintin, Đ. Juričić, P. Boskoski, B. Suhač	Using On-Line Signal Processing Methods for Different Simulated Faults Detection
9,50 - 10,10	B1-MD2-142	H. Ahmadi, M. S. Boluki	Investigation and Determination of Oil Replacement Time by Oil Condition Monitoring for Transtainer Crane Model 4041
10,10 - 10,30	B1-MD2-160	H. Ahmadi	Using Power Spectral Density for Condition Monitoring of Fan

	Tuesday, June 9th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F5**
SESSION B1-CT3 (Surface Coatings and Treatments) Chairperson: Dr. B. Podgornik			
TIME	**LABEL**	**AUTHORS**	**TITLE**
9,30 - 9,50	B1-CT3-73	A. Rota, D. Marchetto, L. Calabri, G. Gazzadi, C. Menozzi	Hydrophobicity of patterned Si surface
9,50 - 10,10	B1-CT3-146	S. Aoki, M. Kawaguchi, A. Mitsuo, A. Suzuki, M. Masuko	Sliding Friction Characteristic of Steel Modified by Carbon Tetrafluoride Plasma Based Ion Implantation
10,10 - 10,30	B1-CT3-147	Y. Iwai, S. Hogmark, E. Coronel	Wear of TiN Coating by Micro Slurry-Jet Erosion

	Tuesday, June 9th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F7**
SESSION B1-FW3 (Friction and Wear) Chairperson: Prof. S. Jacobson			
TIME	**LABEL**	**AUTHORS**	**TITLE**
9,30 - 9,50	B1-FW3-38	H. A. Abdel-Aal	On the Thermodynamics of Wear in Dry Metallic Tribosystems
9,50 - 10,10	B1-FW3-171	G. Di Massa, M. Migliaccio, S. Pagano	A Seismic Insulator Based on Wire Rope Spring and BTU
10,10 - 10,30	B1-FW3-221	E. Ciulli, I. Bartilotta, A. Polacco, S. Manconi, D. Vela, F. S. Guerrieri Paleotti	A Model for Scuffing Prediction

	Tuesday, June 9th, 2009	
Engineering Faculty, University of Pisa		**Building F or GARDEN**
10,30 – 11,00	COFFEE BREAK	

	Tuesday, June 9th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F1**
SESSION B2-BT2 (Biotribology) Chairperson: Prof. I. Etsion			
TIME	**LABEL**	**AUTHORS**	**TITLE**
11,00 - 11,20	B2-BT2-119	R. Crockett, C. Dora, W. Born	Mechanical and Chemical Investigations at the Surface of Natural Cartilage
11,20 - 11,40	B2-BT2-95	T. J. Joyce, D. J. Langton, A. V. F. Nargol	A Study of the Wear of Explanted Metal-on-Metal Resurfacing Hip Prostheses
11,40 - 12,00	B2-BT2-96	T. J. Joyce, H. Grigg, D. J. Langton, A. V. F. Nargol	First Quantification of Self-Polishing in Vivo from Explanted Metal-on-Metal Total Hip Replacements
12,00 - 12,20	B2-BT2-167	L. Mattei, E. Ciulli, F. Di Puccio	Lubrication and Wear Modelling of Joint Implants
12,20 - 12,40	B2-BT2-175	G. Frunza, M.-C. Frunza, C. Suciu	A Tribological Model Regarding Dental Contacts Deterioration

	Tuesday, June 9th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F3**
SESSION B2-ET2 (Ecotribology) Chairperson: Prof. W. J. Bartz			
TIME	**LABEL**	**AUTHORS**	**TITLE**
11,00 - 11,20	B2-ET2-4	B.-R. Höhn, K. Michaelis, H.-P. Otto	Influence of Oil Ageing on Pitting Life Time
11,20 - 11,40	B2-ET2-70	H. Yamakiri, S. Sasaki, T. Kurita, N. Kasashima	Laser Surface Texturing of Silicon Nitride under Lubrication with Water
11,40 - 12,00	B2-ET2-114	T. Ahlroos, M. Linder, A. Helle, K. Holmberg, T. Nevanen, S. Varjus	Biomimetic Approach to Boundary Lubrication
12,00 - 12,20	B2-ET2-78	M. Woydt, R. Luther, F. Gili, A. Igartua	When Alternative Lubes Meet Alternative Fuels

Tuesday, June 9th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F5**

SESSION B2-CT4 (Surface Coatings and Treatments)

Chairperson: Prof. J. Senatorski

TIME	LABEL	AUTHORS	TITLE
11,00 - 11,20	B2-CT4-123	S. Hogmark, C. Good, M. Hanson, F. Svahn	Rolling Contact Fatigue of TiN coated steel
11,20 - 11,40	B2-CT4-149	M. Kawaguchi, S. Aoki, A. Mitsuo, J. Choi, T. Kato	Study of Change in Structure of A-C:H Films Using Laser Raman Spectroscopy
11,40 - 12,00	B2-CT4-153	A. Korenaga, H. Ogawa, K. Miyake, M. Nakano, T. Murakami, S. Sasaki	Tribological Properties of the Textured Surface on Slideway
12,00 - 12,20	B2-CT4-164	B. Verheyde, A. Vanhulsel, D. Havermans	Atmospheric Plasma Coatings on Elastomers for Solid Lubricant Applications
12,20 - 12,40	B2-CT4-172	T. Kümmerle, H. Birkhofer	Performance and Design of Solid Lubricated Rolling Contacts

Tuesday, June 9th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F7**

SESSION B2-MN1 (Micro and Nano Tribology)

Chairperson: Prof. M. Allegrini

TIME	LABEL	AUTHORS	TITLE
11,00 - 11,20	B2-MN1-91	D. Bortoluzzi, M. Benedetti, L. Baglivo, M. De Cecco, R. Piccoli	Dynamic Rupture of Adhesion: an Experimental Approach for a Space Application
11,20 - 11,40	B2-MN1-45	M. D'Acunto	New Perspectives for Controlling Wear on Nanoscale
11,40 - 12,00	B2-MN1-66	M. Rovatti, G. Paolicelli, A. Vanossi, S. Valeri	Adhesion at Nanoscale: an AFM-Based Approach
12,00 - 12,20	B2-MN1-100	K. Tanaka, K. Kosugi, K. Iwamoto	Lateral Component of Capillary Force by a Liquid Meniscus Bridge
12,20 - 12,40	B2-MN1-187	M. Alderighi, V. Ierardi, F. Fuso, R. Solaro, M. Allegrini	AFM-Based Indentation at the Nanometer Scale

	Tuesday, June 9th, 2009
Building F, Engineering Faculty, University of Pisa	**STUDY Room**

POSTER SESSION B

TIME	LABEL	AUTHORS	TITLE
8,50 - 14,00	B-CT-98	S. Klien, T. F. Hanisch, C. H. Surberg, S. Zoppel	Tribology of Laser-Smoothed non-Metallic Surfaces
	B-CT-115	J. Suchánek, P. Jurči, E. Zdravecká	Adhesive Wear of Duplex Treated Low Alloy Steels
	B-CT-141	J. Choi, K. Ishii, T. Kumagai, T. Kato	Critical Shear Stress of DLC Films with Different Film Thickness
	B-CT-154	S. Sampath, F. Cappuccini, K. Anand, M. Giannozzi, B. Badding, G. Ghanime	Wear Mechanisms of a High Temperature Co-based Alloy in Reciprocating Wear
	B-FW-52	J. Li, X. Wang	Surface Texture Effect for the Soft Material
	B-FW-76	G. Belforte, M. Conte, L. Mazza, C. Visconte	Non Contact Wear Measurement on Pneumatic Seals
	B-FW-122	L. Galda, A. Dzierwa, P. Pawlus, R. Reizer	Improvement of Tribological Properties of co-Acting Elements by Oil Pockets Creation on Sliding Surfaces
	B-FW-152	W. B. de Lima, R. de M. Martins, J. L. de C. L. Dantas, R. C. L. da Silva, J. T. N. de Medeiros	Wear of Elastomeric Seals Submitted to a Reciprocating Motion of a Polished Rod in a Pumpjack Stuffing Box
	B-FW-163	J. Ramos, H. Sanchez, G. A. Perez	Wear and Mechanical Properties of the Fe-Mn-Al-C Alloys
	B-FW-229	R. W. Smith, F. Ditroi, E. Corniani, M. Jech, T. Wopelka	Use of the thin layer activation (TLA) technique to measure the on-line wear of motor car engine components
	B-MN-60	Á. Czifra, S. Horváth	Surface Microtopography Analysis in Sliding Friction of Steel-Ferrodo Material Pair
	B-MN-192	N. Gitis, V. Khosla, P. Bariani	Nano and Micro Indentation and Scratch Tests of Thin Films and Coatings
	B-MN-195	H. Zhang, Y. Mitsuya, Y. Kudo, K. Fukuzawa, S. Itoh	Comparisons of Depletion and Replenishment Characteristics of Molecularly Thin PFPE Lubricant Coated on Magnetic Disks under non-UV- and UV-irradiated Conditions

	Tuesday, June 9th, 2009
Engineering Faculty, University of Pisa	**Building F or GARDEN**
12,40 – 14,00	LUNCH

Tuesday, June 9th, 2009	
Building F, Engineering Faculty, University of Pisa	**Room F1**

SESSION B3-HS1; GM1 (Hydrostatic Lubrication; Gas & Magnetic Levitation)
Chairperson: Prof. B. Piccigallo

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	B3-HS1-36	O. Bonneau, J. Frêne, M. Arghir	Study and Design of Double Conical Hybrid Bearing Using Water as Lubricant
14,20 - 14,40	B3-HS1-186	G. Belforte, F. Colombo, T. Raparelli, A. Trivella, V. Viktorov	Aerostatic Thrust Bearings: Experimental Comparison Between Grooved and Plane Pads
14,40 - 15,00	B3-HS1-189	G. Belforte, F. Colombo, T. Raparelli, A. Trivella, V. Viktorov	Gas Thrust Bearings with Metal Wire Cloths Feeding System
15,00 - 15,20	B3-HS1-220	M. Poli, A. Tagliaferri, D. Capellini, P. Albertelli, G. Bianchi	Development of an Electro-Spindle with Hydrostatic Bearings for Milling - Turning Operations
15,20 - 15,40	B3-GM1-222	R. Bassani, A. Musolino, R. Rizzo, M. Tucci	A Null Flux Coil Stabilization System for Passive Maglev Train

Tuesday, June 9th, 2009	
Building F, Engineering Faculty, University of Pisa	**Room F3**

SESSION B3-LA1 (Lubricants and Additives)
Chairperson: Prof. M. Muraki

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	B3-LA1-26	E. Kuhn	Behaviour of Lubricating Greases Stressed by the Friction Process
14,20 - 14,40	B3-LA1-32	M. Vlad, M. M. Szczerek, R. Michalczewski, C. Kajdas, E. Osuch-Słomka	The Effect of AW Additive Concentration on Load-Carrying Capacity of a-C:H:W/Steel Tribosystem
14,40 - 15,00	B3-LA1-44	F. Grün, I. Gódor, A. Javidi, K. Pondicherry	New Insight into Tribofilm Formation and its Tribometric Visualisation
15,00 - 15,20	B3-LA1-74	F. Silvestri, A. Rota, M. Bellini, S. Valeri	Tribological Performances of Biocompatible Lubricant Fluids in the Steel-WCCo Contact

	Tuesday, June 9th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F5**

SESSION B3-CM1 (Contact Mechanics)
Chairperson: Prof. R. F. Salant

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	B3-CM1-23	G. Carbone, F. Bottiglione	Contact Mechanics of Rough Surfaces: Persson's Theory vs. Multiasperity Contact Models
14,20 - 14,40	B3-CM1-37	C. Suciu, E. Diaconescu	Contact Pressure Assessement by Reflectivity of a Solidified Gel Layer
14,40 - 15,00	B3-CM1-58	A. Tasora, E. Prati, M. Silvestri	Mechanisms with Clearances: an Approach Based on Differential Inclusions
15,00 - 15,20	B3-CM1-112	E. Bergseth, S. Björklund	Logarithmical Crowning for Spur Gears
15,20 - 15,40	B3-CM1-33	B. Jalalahmadi, F. Sadeghi	A Numerical Fatigue Damage Model for Life Scatter of Bearing Elements

	Tuesday, June 9th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F7**

SESSION B3-FW4 (Friction and Wear)
Chairperson: Prof. G. Palombarini

TIME	LABEL	AUTHORS	TITLE
14,00 - 14,20	B3-FW4-126	B. Podgornik, S. Milanovic, J. Vižintin	Influence of Heat Treatment and Machining Parameters on Residual Stress Field and Wear of Double-Layer Cast Rolls
14,20 - 14,40	B3-FW4-206	R. Bassani, L. Gestri	Wear Rate under Durability Run on Needle and Cartridge Couple for Direct Gasoline Injector
14,40 - 15,00	B3-FW4-207	R. Bassani, L. Gestri	Tribological Behaviour under Durability Run on Improved Needle and Cartridge Couple for Direct Gasoline Injector
15,00 - 15,20	B3-FW4-138	T. Cousseau, B. Graça, A. Campos, J. Seabra	Friction Torque in Rolling Bearings Lubricated with Biodegradable Greases
15,20 - 15,40	B3-FW4-198	A. M. A. El-Butch, A. F. Fahim	A Study on Stick-Slip Vibration for Dry and Boundary Lubricated Friction with Mass-On-Moving-Belt

	Tuesday, June 9th, 2009
Engineering Faculty, University of Pisa	**Building F or GARDEN**
15,40 – 16,10	COFFEE BREAK

	Tuesday, June 9th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F1**

SESSION B4-HE3 (Hydrodynamics and Elastohydrodynamics)
Chairperson: Prof. S. Pagano

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	B4-HE3-135	M. Silvestri, E. Prati, A. Tasora	A Theoretical Study of Elastohydrodynamic Lubrication in Elastomeric Lip Seals
16,30 - 16,50	B4-HE3-170	E. Ciulli, M. Lorenzetti, D. Vela	Influence of the Experimental Apparatus on Thermal Effects in Elastohydrodynamic Lubricated Contacts
16,50 - 17,10	B4-HE3-183	R. Brancati, E. Rocca, R. Russo, F. Timpone	Experimental and Theoretical Correlations About the Oil Influence in the Gear Rattle Phenomenon

	Tuesday, June 9th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F3**

SESSION B4-LA2 (Lubricants and Additives)
Chairperson: Dr. F. Grün

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	B4-LA2-97	T. Onodera, T. Kuriaki, Y. Morita, A. Suzuki, M. Koyama, H. Tsuboi, N. Hatakeyama, A. Endou, H. Takaba, C. A. Del Carpio, M. Kubo, A. Miyamoto	Lubrication Mechanism of Tribo-Materials: a Computational Chemistry Study
16,30 - 16,50	B4-LA2-92	T. J. Kaldonski, C. Pakowski, D. Ozimina, T. Kaldonski	Comparative Investigations Superficial and Lubricating Ability Properties of Petroleum Products and Ionic Liquids
16,50 - 17,10	B4-LA2-201	K. Persson, P. Falk, J. Andersson	On the Surface Chemistry of Film Formation of Rolling Oil Emulsions

	Tuesday, June 9th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F5**

SESSION B4-CM2; B4-BT3 (Contact Mechanics; Biotribology)
Chairperson: Dr. T. J. Joyce

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	B4-CM2-131	M. R. Ripoll, B. Podgornik, J. Vižintin	Finite Element Analysis of Textured Surfaces under Reciprocating Sliding
16,30 - 16,50	B4-BT3-216	A. Mavraki, P. Cann	Lubricating Film Thickness Measurements with Bovine Serum
16,50 - 17,10	B4-BT3-218	M. A. Accardi, P. M. Cann, D. Dini	Theoretical and Experimental Investigation of Articular Cartilage Behaviour under Controlled Tribological Loading

	Tuesday, June 9th, 2009
Building F, Engineering Faculty, University of Pisa	**Room F7**

SESSION B4-FW5 (Friction and Wear)
Chairperson: Prof. R. Bassani

TIME	LABEL	AUTHORS	TITLE
16,10 - 16,30	B4-FW5-208	H. Saghafian, S. Shabestari, V. Abouei, M. Zarghami	Effect of Fe-Rich Internetallics on the Wear Beheaviour of Al-Si Piston Alloy
16,30 - 16,50	B4-FW5-228	V. V. Makarov, Al. A.Tutnov, A. A. Tutnov, E. E. Alexeyev, Yu. N. Drozdov, A. V. Afanasyev	Studies of Fretting-Corrosion and Vibrations of Fuel Assemblies Water Cooled and Water Moderated Power Reactor
16,50 - 17,10	B4-FW5-223	D. Kesavan, M. Kamaraj	High Temperature Dry Sliding Wear Behavior of Aged Ni-Based Hardfacing Deposit

	Tuesday, June 9th, 2009
Cloister of San Francesco	
20,00 – 22,00	CONFERENCE DINNER

Wednesday, June 10th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F9**

SESSION C

TIME	LABEL	AUTHORS	TITLE
8,50 - 9,30	INVITED LECTURE C	J. Vižintin	Maintenance With Intelligent Diagnostic System

Wednesday, June 10th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F1**

SESSION C1-HE4 (Hydrodynamics and Elastohydrodynamics)

Chairperson: Dr. M. Silvestri

TIME	LABEL	AUTHORS	TITLE
9,30 - 9,50	C1-HE4-176	M. De la Cruz, S. Theodossiades, P. King, H. Rahnejat	Transient Lubricant Conjunctional Behaviour in Transmission Rattle
9,50 - 10,10	C1-HE4-214	D. Vela, E. Ciulli, B. Piccigallo	Wear and Elastohydrodynamic Lubrication Studies of Cams and Followers

Wednesday, June 10th, 2009

Building F, Engineering Faculty, University of Pisa — **Room F3**

SESSION C1-ET3 (Ecotribology)

Chairperson: Dr. H.-P. Otto

TIME	LABEL	AUTHORS	TITLE
9,30 - 9,50	C1-ET3-133	B. Kržan, B. Čeh, I. Košir, J. Vižintin	Lubricant Base Fluids Based on Harvestable Raw Materials
9,50 - 10,10	C1-ET3-168	A. Grigucevičienė, S. J. Asadauskas, D. Bražinskienė, E. Juzeliūnas	Electrochemical Evaluation of Corrosion Inhibition Properties of Vegetable Oil-Based Formulations
10,10 - 10,30	C1-ET3-215	M. Kandeva, E. Assenova, M. Manolova-Daneva	Triboecology as a Methodological Centre of Modern Science

Wednesday, June 10th, 2009	
Building F, Engineering Faculty, University of Pisa	**Room F5**

SESSION C1-CM3 (Contact Mechanics)
Chairperson: Dr. G. Carbone

TIME	LABEL	AUTHORS	TITLE
9,30 - 9,50	C1-CM3-72	Y. Kligerman, V. Zolotarevsky, I. Etsion	Hysteretic Behavior of Spherical Contact under Combined Normal and Tangential Loading
9,50 - 10,10	C1-CM3-173	J. Abdeljalil, B. Maxence, H. Zahouani	Experimental and Numerical Study of Roughness Deformation
10,10 - 10,30	C1-CM3-227	G. Cuccurullo, V. D'Agostino, R. Di Giuda, A. Senatore	An Analitycal Solution and an Experimental Approach for Thermal Field at the Interface of Dry Sliding Surfaces

Wednesday, June 10th, 2009	
Building F, Engineering Faculty, University of Pisa	**Room F7**

SESSION C1-FW6 (Friction and Wear)
Chairperson: Dr. E. Badisch

TIME	LABEL	AUTHORS	TITLE
9,30 - 9,50	C1-FW6-165	J. Olofsson, S. Johansson, S. Jacobson	The Effect of Grain Size on the Tribofilm Formation on the Alumina Friction Drive System of an Ultrasonic Motor
9,50 - 10,10	C1-FW6-180	F. Braghin, F. Cheli, S. Melzi, E. Sabbioni	An Heuristic Skate - Ice Contact Model Obtained Through Finite Element Simulations
10,10 - 10,30	C1-FW6-188	D. Aquaro	Impact of Solid Particulate on Brittle Materials

Wednesday, June 10th, 2009	
Engineering Faculty, University of Pisa	**Building F or GARDEN**
10,30 – 11,00	COFFEE BREAK

	Wednesday, June 10th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F1**
SESSION C2-BT4 (Biotribology) Chairperson: Dr. R. Crockett			
TIME	**LABEL**	**AUTHORS**	**TITLE**
11,00 - 11,20	C2-BT4-144	M. Kalbarczyk, J. Ortega, R. Michalczewski, W. Piekoszewski, M. Szczerek	Comparison of Biomaterials Intended for Hip Joint Implants Using a Reciprocating Pin-on-Plate Tester
11,20 - 11,40	C2-BT4-193	N. Gitis, P. Bariani	Efficient Tribology Testing of Lubricating Oils and Greases
11,40 - 12,00	C2-BT4-196	G. Thorwarth, R. Hauert, C. Falub, U. Mueller	Tribological Behavior of DLC Coated Spinal Disk Implants

	Wednesday, June 10th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F3**
SESSION C2-LA3 (Lubricants and Additives) Chairperson: Prof. E. Kuhn			
TIME	**LABEL**	**AUTHORS**	**TITLE**
11,00 - 11,20	C2-LA3-151	A. Schneider, J. Brenner, C. Tomastik, N. Dörr, F. Franek	Capacity of Selected Ionic Liquids as Alternative EP-AW Additive
11,20 - 11,40	C2-LA3-169	M. R. Alves de Freitas, L. A. Moreira Dourado, C. D. Mendonça de Oliveira, R. Cumino, J. T. Nóbrega de Medeiros	Evaluation in Process of Two Lubricating Oils Applied to a Thrust Bearing
11,40 - 12,00	C2-LA3-211	M. Muraki, K. Nakamura	Friction Reduction Based on Addition of Polymers in Lubricants
12,00 - 12,20	C2-LA3-226	R. Jisa, A. Ristic, J. Brenner, T. Lebersorger, S. Ilo, H. Neumayer, F. Franek	Effectiveness of Lubricant Additives for Copper-Alloy-Steel Sliding Contacts

	Wednesday, June 10th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F5**
SESSION C2-CT5 (Surface Coatings and Treatments) Chairperson: Prof. S. Hogmark			
TIME	**LABEL**	**AUTHORS**	**TITLE**
11,00 - 11,20	C2-CT5-190	L.-M. Berger, K. Lipp, U. May, J. Spatzier, T. Naumann	Rolling Contact Fatigue of HVOF-Sprayed Cr3C2-NiCr Hardmetal Coatings
11,20 - 11,40	C2-CT5-182	S. Sjöberg, J. Sundh	Scuffing Resistance of Gear Surfaces – Influence of Manganese Phosphate and Lubricants
11,40 - 12,00	C2-CT5-212	H. Tanaka, J. Sugimura	Sliding Experiments in Hydrogen and Surface Analysis of DLC Coating Films
12,00 - 12,20	C2-CT5-217	L. Rossetti	Behaviour to Abrasive Wear of Functionally Graded Composite Vitreous Enamelled Steel Sheets

	Wednesday, June 10th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F7**
MINI-SYMPOSIUM Tribology “ART” vs “SCIENCE” Toward Thermodynamics Based Formulation of Tribo-systems Chairman: Prof. H. A. Abdel-Aal			
TIME	**LABEL**	**AUTHORS**	**TITLE**
11,00 - 11,20	C2-STTS-Opening Remarks	H. A. Abdel-Aal	Thermodynamic Issues in Tribology
11,20 - 11,40	C2-STTS-a	R. Bulnes	Third-body’s Friction and its Tribo-fluctuations of Mechanochemistry Nature create the Exergetical Collision-dissipation Wrong Named Friction Coefficient
11,40 - 12,00	C2-STTS-b	L. J. Radovanovic, S. Prvulovic, D. Tolmac	Researching Results of Heat Transfer in Rotating Cylinder
12,00 - 12,20	C2-STTS-c	M. Bigerelle, A. Jourani	Multi-scale Stochastic Modelling of Roughness Amplitude Application on the Belt Finished Surfaces

	Wednesday, June 10th, 2009		
Building F, Engineering Faculty, University of Pisa			**STUDY Room**
POSTER SESSION C			
TIME	**LABEL**	**AUTHORS**	**TITLE**
8,50 - 14,00	C-BT-93	T. J. Joyce, H. Grigg	The Wear of Cobalt Chrome Against Cobalt Chrome, with and without an Amorphous Carbon Coating
	C-BT-94	T. J. Joyce, A. Harsha	Comparative in Vitro Wear Tests of Crosslinked Polyethylene and Ultra High Molecular Weight Polyethylene
	C-BT-156	M. Alderighi, R. Di Stefano, M. C. Barsotti, R. Solaro	AFM Investigation of Different Fibrin Hydrogels
	C-BT-166	L. Mattei, E. Ciulli, A. Ahluwalia, M. Lorenzetti, M. Patronelli, F. Renda	Rheological and Tribological Investigation on Sodium Alginate as Synthetic Synovial Fluid
	C-MD-47	K. Mollazade, H. Ahmadi	Journal-Bearing Fault Diagnosis of an External Gear Hydraulic Pump Using Power Spectral Density
	C-MD-48	K. Mollazade, H. Ahmadi, R. Alimardani, M. Omid	Application of J48 Algorithm for Gear Tooth Fault Diagnosis of Tractor Steering Hydraulic Pump
	C-MD-157	H. Ahmadi	Determination Oil Life Crane Iebherr Lhm 500g Model 301 by oil Condition Monitoring
	C-MD-159	H. Ahmadi	Electro-Pump Fault Diagnosis of Marine Ship by Vibration Condition Monitoring
	C-MT-50	L. Micele, L. Silvestroni, G. Palombarini, S. Guicciardi	Characterization of Abrasive Wear Resistance of SiC-MoSi2 Composites by Microscale Abrasion Test
	C-MT-57	T. Hanisch, A. Diem, K. Lingenhöle, C. H. Surberg	Influence of Different Steels on the Tribological Behavior of Nitrocarburized Layers
	C-MT-81	H. A. Abdel-Aal, S. Mezghani, M. El Mansori	Dry Reciprocating Sliding of WC-Co and Commercially Pure Tungsten on Titanium under the Influence of Biasing DC-Current
	C-MT-177	D. Myszka, K. Stoberska, J. Senatorski, A. Kowalski, Z. Pirowski	An Evaluation of Friction Wear Behaviour of Ausferritic Ductile Iron
	C-MT-200	L. Deleanu, G. Andrei, A. Başa, S. Chiculiță, A. Cantaragiu	Evaluating Composites with PTFE Matrix when Sliding in Water
	C-MT-225	C. M. Johannesson, N. Sofia	Tacit Knowledge Information Given Through the Fingers

	Wednesday, June 10th, 2009		
Building F, Engineering Faculty, University of Pisa			**Room F9**
12,20 – 12,40	CLOSURE		