Natural and Biomimetic Mechanosensing Conference

26 - 28 October 2009, Dresden, Germany

Time	25 October	Time	26 October	Time	27 October	Time	28 October
		8:30-8:50	**Andreas Offenhäusser - Welcome address CILIA and its objectives**		**Session 5: Biomechanics and robotics**		**Sesion 9: Audition in insects**
			Session 1: Flow sensing in crickets I	8:30-9:15	**5.1 Invited talk: Barbara Webb - Adaptive and multimodal sensing in insects and robots**	8:30-9:15	**9.1 Invited talk: Berthold Hedwig - How to find your way around with simple ears?**
		8:50-9:35	**1.1 Jerome Casas - Introductory lecture on the cricekt cercal system including Bionic MEMS help understanding Nature: viscous coupling among natural and artificial hairs**	9:15-10:00	**5.2 Invited talk: Christian Balkenius - System-level models of the brain**	9:15-10:00	**9.2 Invited talk: Daniel Robert - Adaptive sensing in insect hearing organs**
		9:35-10:00	1.2 John Miller - The Afferent Arborizations of Filiform Mechanosensory Hairs in the Cricket Cercal System are Segregated by the Length and by the Position of the Hairs Along the Cerci				
		10:00-10:30	Coffee break	*10:00-10:30*	Coffee break	*10:00-10:30*	Coffee break
			Session 2: Flow sensing in crickets II		**Session 6: Lateral line**		**Session 10: Mammalian cochlea**
		10:30-11:15	**2.1 Moritz Franosch - How crickets can determine the direction of an attacking predator**	10:30-11:15	**6.1 Invited talk: Sheryl Coombs - Active and passive flow-sensing by the lateral line**	10:30-11:15	**10.1 Invited talk: Karl Grosh - Building microphones based on the mammalian cochlea**
		11:15-11:40	2.2 Fabienne Dupuy - How do crickets deal with their noisy environment to perceive an attacking predator: some neurophysiological clues	11:15-11:40	6.2 Gaston C Sendin - Experimental determination of transfer characteristics of superficial neuromasts of the fish lateral line organ of the zebrafish (Danio rerio)	11:15-11:40	10.2 Daibhid O Maoileidigh - Active Signal Detection within the Mammalian Inner Ear
		11:40-12:05	2.3 Pasupathy Sangareddy Alagirisamy - Scaled up model investigation of viscous - mediated coupling between crickets cercal hair sensors in an oscillatory flow	11:40-12:05	6.3 Adrian Klein - Detection of object position, vortex shedding frequency and flow velocity using artificial lateral lines	11:40-12:05	10.3 Johannes Baumgart - Fluid Forces in the Hair Bundle of the Bullfrog's Sacculus
		12:05-13:30	Lunch break	*12:05-13:30*	Lunch break	*12:05-13:30*	Lunch break
			Session 3: Flow sensing with hairs		**Session 7: Bat sonar system**		**Session 11: Applications II**
		13:30-14:15	**3.1 Emma Johnson - The morphology and mechanics of the cricket mechanosensor array**	13:30-14:15	**7.1 Invited talk: Lutz Wiegrebe - A functional model of sonar processing in the bat auditory brainstem**	13:30-14:15	**11.1 Invited talk: Jan De Backer - Biomedical imaging through Computational Fluid Dynamics: applications in the field of respiratory medicine**
		14:15-14:40	3.2 Clemens Schaber - Micromechanics of spider mechanoreceptors: viscoelastic properties of cuticle for the tuning of vibration and air flow	14:15-14:40	7.2 Fontaine Bertrand - Biosonar sequences analysis using first-spike latency encoding	14:15- 14:40	11.2 Christoph Bruecker - Tactile hair arrays for autonomeous nagivation
		14:40-15:05	3.3 Gregory Lewin - Computational Simulations of Hair-Hair Interaction	14:40-15:05	7.3 Fons De Mey - Could bats perform least mean squares estimation to obtain reflector location?	14:40-15:05	11.3 Kohji Mitsubayashi - Chemo-mechanical transducer for intelligent biosensors and bio-robotics
		15:05-15:30	3.4 Ramasubramanian Kottumakulal Jaganatharaja - Optimized biomimetic hair sensor arrays for sensing oscillating AIR flows				
		15:30-16:00	Coffee break	*15:05-15:30*	Coffee break	*15:05-15:30*	Coffee break
			Session 4: Applications I		**Session 8: Robotics**		**Session 12: Applications III**
		16:00-16:45	**4.1 Invited talk: Alex Parfitt - Biomimetic Mechanosensing in Aerospace and Defence**	15:30-16:15	**8.1 Invited talk: Robert Allen - Bioinspired acoustic and cooperative robotic systems**	15:30-15:55	12.1 Sliman Bensmaia - Real-time implementation of SA1 and RA models for tactile feedback in an upper-limb neural prosthesis
						15:55-16:20	12.2 Erica Morley - Microacoustics of song propagation and reception in Drosophila
17:00-20:00	**Registration**	**17:00-19:00**	**Poster Session with wine and snacks**	**17:00-19:00**	**Guided city tour from the hotel to the restaurant**	**about 16:30**	**Farewell**
18:00-20:00	**Come-together**			**19:00**	**Conference Dinner**		