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AIX MARSEILLE UNIVERSITÉ
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IMI Program - Scientific events 2025 / 2026

Month	Day	Name	Event	Type / Title / website	Location	Host	Information / Registration
September	Friday 19/9 at 11h	Mark.C Thomson Professor of Fluid Mechanics Department of Mechanical and Aerospace Engineering Monash University, Clayton, 3800, AUSTRALIA	Shape optimisation to enhance flow induced vibration of a cylinder using Bayesian Optimisation	Bayesian optimisation with Gaussian process regression is applied to optimise the shape of an elastically mounted cylinder undergoing transverse flow-induced vibration (FIV). The vibration amplitude and mean power coefficient are obtained from two-dimensional numerical simulations, with Reynolds number $Re = 100$. First, shape optimisation is performed to maximise the amplitude of undamped vibrations. The optimised shape is found to be a thin crescent cylinder aligned perpendicular to the oncoming flow. The optimised shapes were found to exhibit a combined VIV-galloping response, which is not observed for circular and elliptical cylinders at the same Reynolds number. Shape optimisation was also performed to maximise the power coefficient, where the power generation device is modelled as a linear damper. The power-optimised cylinders were also thin crescents, but with greater curvature compared to the amplitude-optimised cylinders. Compared to the circular cylinder, improvements in the power coefficient and efficiency of up to 523% and 245%, respectively, were obtained.	IRPHE	IRPHE IMI	https://calendar.google.com/calendar/embed?src=seminaire.irphe%40gmail.com&ctz=Europe%2FBrussels
September			IMI Photo Gallery	The Institute invites the entire IMI community to take part in its first photo exhibition. Through this exhibition, we wish to highlight the Research work of the Institute's members through photography.	LMA IUSTI M2P2 IRPHE	IMI	Institut Mécanique et Ingénierie (IMI) launches its first-ever photo exhibition: Science from every angle
September	16 to 20		amU Festival of Science and Arts "Science & Beliefs" IMI : Thursday 18th / 15h30 to 17h00		MUCEM	amU IMI	Link : https://feg.univ-amu.fr/fr/actualites/appel-participation-festival-sciences-arts-2025 contact : mint-contact@univ-amu.fr
September	23		X-Ray Tomography Half-Day Workshop Includes Buffet		IRPHE	IMI	Registration https://evento.renater.fr/survey/fedeimi-demi-journee-tomographie-a-rayon-x-0ij8et2a
October	1, 6 and 8	Keaton Burns Research Scientist in the Mathematics Department at MIT and main developer of the spectral solver Dedalus (https://dedalus-project.org)	During his stay, he will give a 5-hour short course on Dedalus and its applications to fluid mechanics problems. The course will begin with a general introduction covering some theoretical aspects, followed by hands-on sessions tackling classical fluid dynamics examples such as 2D turbulence, shallow water waves, and convection. Dedalus is an easy-to-use, Python-based framework for solving a wide range of partial differential equations using spectral methods. It is particularly well-suited for fluid dynamics. By progressing through problems of increasing complexity, participants will gain the skills to use this solver independently by the end of the course.		IRPHE	IRPHE IMII	The lectures will take place in the seminar room at IRPHE on: Wednesday, Oct 1, 14:00–15:00 – General presentation Monday, Oct 6, 14:00–16:00 – Practical session Wednesday, Oct 8, 14:00–16:00 – Practical session
October	16 to 23	Peter Berke ULB (Belgique) Université Libre de Bruxelles	Seminar : Controlled snap-through behavior of bistable deployable structures		to be define	IUSTI IMI	To be precised
October	20 to 30	Wilasinee Yoochatchaval Kasetsart University (KU) Bangkok	Seminar : Sustainable sewage treatment and resource recovery technologies for developing countries		to be define	M2P2 IMI	To be precised
October	27 to 29	50th Congress of the Society of Biomechanics	Congress		Campus Saint-Charles	Lab IMI + LBA + ISM	http://sb2025-marseille.sciencesconf.org/
November Postponed	13	IMI labs visit	External visit for companies and external contributors		LMA IUSTI M2P2 IRPHE	IMI	Contact Nicolas Favrie nicolas.favrie@univ-amu.fr
November	17 Deadline		CALL RH 2025 IMI website	IMI is launching its Human Resources 2025 Call, which will fund 2 post-doctoral research projects lasting up to 24 months (12 months renewable once). Each post-doc will benefit from an additional support budget of 5 keuros/year (for symposium participation, international collaboration missions, small equipment, etc.).	LMA IUSTI M2P2 IRPHE	IMI	

November	To be define		IMI "Milieux urbains & ville durable"	To be define	IMI	To be precised	
December	8 to 12	Jacobo Valera Rodriguez	University of Texas - Austin Seminar : Designing a nuclear fusion pilot plant: what we know about burning plasma and alpha particle Physics?	to be define	M2P2 IMI	To be precised	
December	15 Deadline		CALL Recherche n°7 IMI Website	LMA IUSTI M2P2 IRPHE	IMI	Download the subscription form	
December	15 Deadline		CALL Pédagogie innovante & diffusion scientifique IMI Website	LMA IUSTI M2P2 IRPHE	IMI	Download the subscription form here	
All the time	2025		Funding of up to 3 000,00 € IMI website	LMA IUSTI M2P2 IRPHE	IMI	This call aims to promote scientific exchanges and improve our international collaborations. The Institute will cover up to €3,000 in travel and accommodation expenses for each guest. In return, guests are expected to give a seminar and/or a course within the Institute.	
March 2026	March 31 to april 2	16th GRUTTE	International congress	Campus Saint-Charles	M2P2 IMI	https://gruttee2026.sciencesconf.org/	
March 2026	To be define	Nicholas Ongwen	Tom Mboya University (Kenya)	to be define	LMA IMI	Seminar High-Performance Computing for Smart Materials: Applications to Shape Memory Alloys Abstract: This seminar addresses the use of high-performance computing methods for the constitutive modeling and numerical simulation of the thermo-mechanical response of shape memory alloys. Emphasis will be placed on advanced computational strategies for capturing phase transformations, thermo-mechanical coupling, and hysteresis effects inherent to SMAs. Recent developments in multiscale modeling and finite element implementations for smart materials will be discussed, with a focus on their implications for the design and optimization of next-generation functional alloys. The seminar will also feature a demonstration of numerical frameworks and computational tools currently employed in this research domain.	
All the time	2025		Funding of up to 5 000,00 € From 3 weeks to 3 months outside France in a single period https://institut-imi.univ-amu.fr/fr/actualites/phd-international-mobility-program	LMA IUSTI M2P2 IRPHE	IMI	The Institute for Mechanical Engineering of Aix-Marseille University is launching its PhD international mobility program (from 4 weeks up to 3 months outside France). +	



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