Le LAAS-CNRS organise un cycle de conférences faisant intervenir des scientifiques de renom dans les différents domaines de recherche du laboratoire. L’intitulé de ce cycle est lié au nom de Georges Giralt, un des directeurs fondateurs du LAAS-CNRS, en raison de son aptitude à encourager et à tirer partie de l’interdisciplinarité, notamment en s’appuyant sur l’expérience acquise lors de son parcours. En effet, ses premiers travaux ont débouché sur des résultats marquants en électronique de puissance et sa vision pionnière et son rôle essentiel en matière de robotique mobile sont mondialement reconnus.

Ce cycle reprend et perpétue le fil des conférences de prestige organisées pour des occasions spéciales, comme par exemple, la célébration du 40e anniversaire du laboratoire et plus récemment le « Symposium Georges Giralt » en octobre 2013.

Ces conférences, d’une durée d’une heure (exposé 45 mn + questions 15 mn), ont pour but d’établir un rendez-vous régulier, largement ouvert à la communauté toulousaine et bien au-delà, pour des échanges autour de défis transverses posés aux différents thèmes de recherche concernés par les sciences et technologie de l’information et de l’ingénierie des systèmes.

L’information sur les conférences passées et à venir est disponible à partir de :
http://conf.laas.fr/talk

LAAS-CNRS is launching a series of conferences hosting renowned scientists in the various research areas developed in the laboratory. The title of this series refers to Georges Giralt, one of the founding directors of LAAS-CNRS, because of his leading role in shaping the research areas of the laboratory and for his incentive to encourage and take advantage of interdisciplinarity, fostered by his own experience: his early works developed salient results in power electronics and his pioneering and seminal activities in mobile robotics are respected world-wide.

This series builds upon and perpetuates the set of prestigious conferences given in the past for some special occasions: the celebration of LAAS-CNRS 40th anniversary, or more recently, the Georges Giralt Symposium held in October 2013.

These conferences of one hour duration (typically, 45 mn talk + 15 mn questions) is meant to establish a regular rendez-vous, largely open to the scientific community of Toulouse and beyond, for exchanges on cross-cutting challenges spanning the various research topics in Sciences and Technologies of Information and of Systems Engineering.

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Résumé de l’exposé

Networking is about sharing resources, from sharing links with packet-switching to sharing servers in the cloud with virtual machines and parallel algorithms. Progress is driven mostly by clever inventions. In many cases, modeling and analysis lead to improved schemes. The time and space scales of networks necessitate distributed algorithms. Analyzing these algorithms often requires new methods for approximating the complex random dynamics and simplifying the objectives of the control schemes. The demand and available resources are determined by users and businesses. Thus, an economic layer interacts with the technology layer. These interactions are governed by relationships between demand, quality, and prices. These relationships may result from strategic behavior. As the technology evolves, new problems emerge that raise new challenges for researchers. In this talk, I review some of the problems that have fascinated me.

L’orateur

Dr. Walrand received his Ph.D. from the Department of Electrical Engineering and Computer Science at the University of California, Berkeley, US, and has been on the faculty of that department since 1982. His research interests include stochastic processes, queuing theory, communication networks, game theory, and the economics of the Internet.


Dr. Walrand has received numerous awards for his work over the years. He is a Fellow of the Belgian American Education Foundation and of the IEEE. Additionally, he is a recipient of the Lanchester Prize, the Stephen O. Rice Prize, the IEEE Kobayashi Award, and the 2013 ACM SIGMETRICS Achievement Award.

For more information on Dr. Jean Walrand, please visit his Website at: http://www.eecs.berkeley.edu/Faculty/Homepages/walrand.html