2014 Robotics Seminar (1)/IFToMM Japan Council

Time: Tuesday March 18th, 14:30-15:3

Place: Tokyo University of Agriculture and Technology Koganei Campus, Blg 9, room 505

Host: Gentiane Venture

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Dynamic Modeling of Floating Systems: Application to Eel-like Robot and Rowing system



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Abstract: This talk presents the dynamic modeling of floating systems with application for three-dimensional swimming eel-like robot and rowing-like system. To obtain the Cartesian evolution during the design or control of these systems the dynamic models must be used. Owing to the complexity of such systems efficient and simple tools are needed to obtain their model. For this goal we propose an efficient recursive Newton-Euler approach which is easy to implement. It can be programmed either numerically or using efficient customized symbolic techniques