







第368回GMSI公開セミナー/第191回CIAiSセミナー/第113回WINGSセミナー

Complex Robotic Systems: Modeling, Control, and Planning using Dual Quaternion Algebra

Dr. Bruno Vilhena Adorno

Senior Lecturer The University of Manchester, UK

Date: Friday, October 28, 2022 11:00-12:00

Venue: 31A, 3F Faculty of Engineering Bldg. 2/

Online (hybrid)

Abstract:

To manage the complexity of modern robotic systems, the modeling, control, planning, and high-level task descriptions are usually dealt with using different mathematical representations. This results in a theoretical patchwork that might introduce unnecessary mathematical artifacts in the system, making both the analysis and design more difficult. In this talk, I will present our efforts to unify robot modeling, control, and planning using dual quaternion algebra with some applications.





Registration (Venue/Online) https://forms.gle/6c8viMSUVH1o **PXB69** Please register by Oct. 24.

主催: 東京大学大学院工学系研究科専攻間横断型教育プログラム 機械システム・イノベーション (GMSI)

最先端融合科学イノベーション教育研究コンソーシアム (CIAiS)

来社会協創国際卓越大学院(WINGS CFS) 量子科学技術国際卓越大学院(WINGS-QSTEP) 統合物質·科学国際卓越大学院(MERIT-WINGS) 高齢社会総合研究国際卓越大学院(WINGS-GLAFS)

東京大学大学院工学系研究科機械工学専攻 助教 Marques Marinho Murilo 本件連絡先:

GMSI事務局 E-mail: office@gmsi.t.u-tokyo.ac.jp Phone: 03-5841-0696