Caltech
Student-Faculty Programs

Aeronautics and Mechanical Engineering

Session G

Room: B122 Gates Annex

1:00 - 1:20 PM	***Yit Xueng Lim*** Caltech *The Associates SURF Fellow*	Effects of kinematic reference quality on dynamics-aware humanoid motion retargeting	Aaron D. Ames *Bren Professor of Mechanical and Civil Engineering, Control and Dynamical Systems, and Aerospace* Sergio A. Esteban *Graduate Student in Mechanical Engineering* Junheng Li *Postdoctoral Scholar Research Associate in Mechanical and Civil Engineering*
1:20 - 1:40 PM	***Juan E. Beron*** Universidad Pontificia Bolivariana	Safety and contingency certificates for Mars-analog drone landing	Aaron D. Ames *Bren Professor of Mechanical and Civil Engineering, Control and Dynamical Systems, and Aerospace* Joe Moeller *Postdoctoral Scholar Research Associate in Mechanical and Civil Engineering* Yana Lishkova *Postdoctoral Scholar Research Associate in Mechanical and Civil Engineering* Pedro Roque *Postdoctoral Scholar Research Associate in Mechanical and Civil Engineering*
1:40 - 2:00 PM	***Hampus G. Serneke*** Lund University	Anytime safe reinforcement learning using safe gradient flows in robotic control	Aaron D. Ames *Bren Professor of Mechanical and Civil Engineering, Control and Dynamical Systems, and Aerospace* Pol Mestres *Postdoctoral Scholar Research Associate in Mechanical and Civil Engineering*
2:00 - 2:20 PM	***Deon F. Petrizzo*** Caltech *Mr. and Mrs. Robert C. Loschke SURF Fellow*	Fast configuration-space convex set computation for optimal motion planning	Aaron D. Ames *Bren Professor of Mechanical and Civil Engineering, Control and Dynamical Systems, and Aerospace* Blake Werner *Graduate Student in Mechanical Engineering* Taoran Liu

2:20 - 2:40 PM	***Alexander F. Vasquez*** Pontificia Universidad Catolica del Peru	Actuated perception for sage autonomous target following on humanoid robots	Aaron D. Ames *Bren Professor of Mechanical and Civil Engineering, Control and Dynamical Systems, and Aerospace*
2:40 - 2:50 PM	***BREAK***		
2:50 - 3:10 PM	***Daavleen Kaur*** Iowa State University	Design and fabrication of in-situ loading frames for full-field deformation measurements on metamaterial structures	Angkur Shaikeea *Assistant Professor of Aerospace; Bren Scholar* Rosan Naik *Postdoctoral Scholar Research Associate in Aerospace*
3:10 - 3:30 PM	***Jacqueline R. Zhou*** Caltech *Carl F. Braun SURF Fellow*	Rip-stop metamaterials inspired by double gyroids	Angkur Shaikeea *Assistant Professor of Aerospace; Bren Scholar* Rosan Naik *Postdoctoral Scholar Research Associate in Aerospace*
3:30 - 3:50 PM	***Taehan Lee*** Georgia Institute of Technology	Spectral analysis of supersonic cylinder wake	Joseph E. Shepherd *C.L. "Kelly" Johnson Professor of Aeronautics and Mechanical Engineering, Emeritus* William Feasey *Graduate Student in Aerospace*
3:50 - 4:10 PM	***Reema B. Almadhi*** Caltech *Saul and Joan Cogen Memorial SURF Fellow*	Effect of molecular structure on the autoignition behavior of sustainable aviation fuels	Joseph E. Shepherd *C.L. "Kelly" Johnson Professor of Aeronautics and Mechanical Engineering, Emeritus* Charline Fouchier *Senior Postdoctoral Scholar Research Associate in Aerospace*
4:10 - 4:30 PM	***Jorge Sanz Sanchez*** Universidad Carlos III de Madrid / UCLA (Exchange)	Modeling vaporization and pre-ignition dynamics in a cubic test cell relevant to the ASTM E659 apparatus	Joseph E. Shepherd *C.L. "Kelly" Johnson Professor of Aeronautics and Mechanical Engineering, Emeritus* Charline Fouchier *Senior Postdoctoral Scholar Research Associate in Aerospace*
4:30 - 4:50 PM	***Luis Y. Serrano Laguna*** Caltech *Toshi Kubota Aeronautics SURF Fellow*	Advancing ASTM E659 testing: Thermal modeling of ASTM E659 apparatus	Joseph E. Shepherd *C.L. "Kelly" Johnson Professor of Aeronautics and Mechanical Engineering, Emeritus* Charline Fouchier *Senior Postdoctoral Scholar Research Associate in Aerospace*