PREFACE

The 2014 Space Flight Mechanics Meeting was held at the La Fonda Inn in Santa Fe, New Mexico from January 26th to 30th 2014. The meeting was sponsored by the American Astronautical Society (AAS) Space Flight Mechanics Technical Committee and co-sponsored by the American Institute of Aeronautics and Astronautics (AIAA) Astrodynamics Technical Committee. The 232 people who registered for the meeting included 92 students, as well as professional engineers, scientists, and mathematicians representing the government, industry, and academic sectors of the United States and 13 other countries. There were 220 papers presented in 27 sessions on topics spanning the breadth of current research in astrodynamics and space flight mechanics.

Our plenary session this year was given by Moriba Jah, Michele Gaudreault, and Timothy (TK) Roberts, with special assistance from Belinda Marchand. The session detailed the Air Force Space Command (AFSPC) Astrodynamics Innovation Committee (AIC), its Astrodynamics Collaborative Environment (ACE), and the mechanism for community involvement, namely, the Air Force Research Laboratory (AFRL) Advanced Sciences and Technology Research Institute for Astronautics (ASTRIA). The session was very well attended and provided much information on what the Air Force is doing and how the broader astrodynamics community can become involved.

On Tuesday evening, the Brouwer Award Lecture was given by Dr. Robert Bishop, the 2013 AAS Dirk Brouwer Award Honoree. Dr. Bishop is the Dean of Engineering at Marquette University and holds a faculty position in the Department of Electrical and Computer Engineering. Previously he held the position of Chairman of the Department of Aerospace Engineering and Engineering Mechanics at The University of Texas at Austin where held the Joe. J. King Professorship and was a Distinguished Teaching Professor. His lecture was entitled "A Navigator's Journey" and detailed his research and teaching, as told through the stories of the people, programs, and places stretching across time from early Space Shuttle rendezvous missions to plans for precision fast-to-flight entry, descent, and landing navigation with hazard detection and avoidance.

The editors would like extend their sincerest gratitude to each of the Session Chairs that helped make this meeting a success: Felix Hoots, Fernando Abilleira, Bob Melton, Kathleen Howell, Fu-Yuen Hsiao, Brian Page, Yanping Guo, Anastassios Petropoulos, Laureano Cangahuala, Carolin Frueh, Tom Starchville, Kohei Fujimoto, Chris Ranieri, Ryan Russell, Roberto Furfaro, Angela Bowes, Jay McMahon, Aline Zimmer, Lincoln Wood, David Finkelman, Moriba Jah, Maruthi Akella, Kyle DeMars, Jeff Parker; and double thanks to GeoffryWawrzyniak and Marcus Holzinger for chairing two sessions each. We would also like to thank the numerous volunteers who staffed the registration and information tables during the conference. Your help is much appreciated. Lastly, we would like to thank the authors for their efforts in performing world-class research and their dedication to present their

work to our astrodynamics community. We are all richer for your service and commitment to excellence.

Dr. Roby S. Wilson Jet Propulsion Laboratory AAS Technical Chair

Dr. Renato Zanetti NASA Johnson Space Center AIAA Technical Chair Dr. Donald L. Mackison University of Colorado AAS General Chair

Ossama Abdelkhalik Michigan Technological University AIAA General Chair