Minutes of the 17th meeting of IFToMM Technical Committee for Multibody Dynamics

Thursday, July 25, 2023, 14:00 CET, at IST Lisbon, Portugal

Attendees:

Font-Llagunes (Chair, Spain), Ambrosio (Portugal), Müller (Austria), Kövecses (Canada), McPhee (Canada), Cammarata -replacing Sinatra- (Italy), Wojtyra (Poland), Mikkola (Finland), Zelei (Hungary), Flores (Portugal), Polach (Czech R.), Kecskeméthy (Germany), González (Spain).

Invited:

Peter Eberhard

Regrets:

Escalona (Secretary, Spain), Ziegler (Germany).

1. Opening by the Chair

The 17th meeting of the IFToMM TC for Multibody Dynamics was opened at 2.08, on July 25, 2023.

Font-Llagunes leads the meeting: Escalona is not present and González will be the acting Secretary.

2. Approval of minutes from last meeting

The minutes of the previous meeting, held online, distributed via email, is approved by unanimous vote.

3. Membership

- Currently there are 48 members (27 IFToMM MOs). The country distribution of the members is shown on screen.
- New proposed members: Xinxin Yu (China), Giovanni Muscolo (Italy). Yu is from China and was proposed by the Chinese committee, although she lives in Spain and will soon move to The Netherlands.
- New members are accepted by unanimity.
- The new number of members is 50.

4. Lagrange award (best PhD award)

- González, coordinator of the Lagrange Award "Multibody System Dynamics Outstanding PhD Thesis Prize", informs about the result of the last edition.
- The winner receives a certificate, Springer books to the value of € 250 and oneyear subscription to Multibody System Dynamics..
- Kecskeméthy, Lankarani and Kim acted as evaluation committee. González announces that they will continue in the 2023 edition of the award.
- Winner of the 2022 edition was Philipp Eichmeir, who did his PhD at TU Wien (Austria).
- An honourable mention was awarded to Simon Venpaemel, from KU Leuven.

- The 2023 edition will open on January 1, 2024, with the same rules as the previous one.
- Two suggestions are proposed by the Award Committe: to decide on the winner earlier so that they can attend the conference and receive the award in person. Also: in IFToMM conferences they can apply to the Young Delegate Program.

5. Conferences and events

2022

- 18th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Saint Louis, USA, August 14-27, 2022
- 4th International Multibody System Dynamics Workshop & Summer School, Politecnico di Milano, September 12-16, 2022
- The 6th Joint International Conference on Multibody System Dynamics (IMSD) and The 10th Asian Conference on Multibody Dynamics (ACMD), New Delhi, India, October 16-20, 2022

2023

- 2nd IFToMM for Sustainable Development Goals Workshop (I4SDG 2023), Bilbao, Spain, June 29-30, 2023
- 11th ECCOMAS Multibody Dynamics, Lisbon, Portugal, July 24-28, 2023
- 19th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Boston, MA, USA, August 20-23, 2023
- 5th International Multibody System Dynamics Workshop & Summer School, Lake Como School of Advanced Studies, September 11-15, 2023
- 16th IFToMM World Congress, Tokyo, Japan, November 5-10, 2023

2024

- The 7th Joint International Conference on Multibody System Dynamics (IMSD), Madison, WI, USA, June 9-13, 2024
- 8th Symposium on Multibody and Mechatronics Systems (MuSMe2024), Universidad Panamericana, Guadalajara, Mexico, September 23-26, 2024
- Advanced School "Computational and geometric mechanics of discrete and continuum systems", International Centre for Mechanical Sciences (CISM), Udine, Italy, September 23-27, 2024.
- Asian Conference on Multibody Dynamics ACMD 2024, Suwon, Korea, August 25 – 28, 2024.
- 20th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), dates and location to be determined

Remark by Eberhard: we should be careful when writing support letters for these events, to make it clear that the TC or IFToMM is not committing to supporting the events financially or being responsible for any liability. The word "support" should be avoided; "endorse" is a better option.

Kecskeméthy: IFToMM does not have a legal department, but the phrasing of such letters will be reconsidered.

6. Publications

a. Books

- Wang, J., Multiscale Multibody Dynamics, Springer, 2023.
- Nandihal, P.V., Mohan, A., Saha, S.K., Dynamics of Rigid-Flexible Robots and Multibody Systems, Springer, 2022.
- Pucheta, M., Cardona, A., Preidikman, S., Hecker, R., Multibody Mechatronic Systems. Papers from the MuSMe Conference in 2021, Springer, 2021.

b. Thematic Issues

- Ambrósio, J.A.C, Mikkola, A., MUBO Special Issue on its 25th Anniversary. Multibody System Dynamics, 2023.
- Gerstmayr, J., Orzechowski, G., Tassora, A., Special Issue on Artificial Intelligence within Multibody System Dynamics (open). Multibody System Dynamics.
- Müller, A., Kövecses, J., Kim, C., Padmanabhan, C., Orosz, G., Joint Special Issue: Design and Control of Responsive Robots. Journal of Computational and Nonlinear Dynamics 18(6) – Journal of Mechanisms and Robotics 15(3), 2023.

7. Elections of new chair/co-chair

The following char, co-chair and secretary positions are put forward.: González, chair; Ziegler, co-chair; Escalona, secretary. The proposal is approved by unanimity.

The members of the TC thank Font-Llagunes for his work as chair of the TC.

8. Next TC meeting

The next TC meeting will take place during the IMSD 2024 Conference in Madison, Wisconsin (USA). The meeting is expected to take place in person.

9. Other business

The meeting was adjourned at 14:54.

Respectfully submitted,

José L. Escalona Secretary of IFToMM TC-Multibody Dynamics