Post-Doctoral Position in Multibody Dynamics for space applications

Department of Aerospace Engineering University of Maryland College Park, Maryland 20742

The Department of Aerospace Engineering at the University of Maryland is seeking a highly motivated individual for a Postdoctoral Fellow position funded by grants and contracts. This individual will work on projects pertaining to the development of finite-element-based multibody dynamics tools for application to large, flexible space structures and assembly in space.

The successful candidate will work with Prof. Bauchau in the Department of Aerospace Engineering at the University of Maryland, in collaboration with the National Institute of Aerospace in Hampton, Virginia. Specifically, the candidate will develop new formulations for modeling complex multibody systems within the framework of the motion formalism for flexible multibody dynamics. The formulations will be applied to the modeling of cable actuated flexible space structures and validated against data provided by NASA Langley Research Center. Impact and contact problems in flexible space structures will also be investigated. The successful candidate will also have the opportunity to hone their leadership and grant-writing skills as they work on these projects and apply for additional grants.

Applicants must possess a PhD in Mechanical Engineering, Aerospace Engineering, or related fields. Experience in multibody dynamics, finite element methods, numerical methods, and parallel computing is highly desirable. Organizational and communication skills (oral and written), and enthusiasm for multidisciplinary collaboration are welcome.

This is a grant-funded position with 2 years of funding available and a multi-year duration possible, contingent upon satisfactory performance and continued funding. It is a non-tenure-track staff position with an annual salary of \$62,000.

Please send a cover letter, curriculum vitae, and statement of research interests to

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