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MULTI-SCALE AND MULTI-PHYSIC INTERFACE MODELS 1000

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ABSTRACT

Interfaces/interphases play a crucial role in the global behaviour of materials and structures within many engineering fields. Suitable models are required to accurately take into account their multi-scale and multi-physic nature. The dual purpose of the present mini-symposium is to collect recent analytical and computational models of imperfect interfaces in structures and in composite materials and to bring together the leading experts in this field to promote discussions and collaborations. Contributions concerning theoretical, numerical and experimental aspects are welcome. Topics to be covered include, but are not limited to, the following:

- multi-scale modeling of interphases, thin films and surfaces, contact laws;
- models of imperfect, sliding, debonding or cohesive interfaces in composite materials;
- damage, fracture and other dissipative processes at interfaces;
- advanced finite element methods for the computational modeling of interfaces and contact surfaces.

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