

## COMPUTATIONAL TECHNIQUES AND SIMULATION OF DAMAGE/FAILURE IN COMPOSITE MATERIALS

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### ABSTRACT

Nowadays, there are different open lines of research related to the development of computational techniques for modelling damage and/or fracture and, eventually, failure of composites. Most of them might be embedded within two general ones:

- Strategies based on continuum damage mechanics for characterisation of the state of damage associated to fibre rupture, matrix cracking, delamination, etc (e.g. [1]).
- Approaches aiming to replicate virtually the discontinuity associated to cracks, voids, etc (e.g. [2-3]).

This minisymposium aims to gather contributions on damage modelling, virtual fracture, techniques bridging the link between continuum and discontinuum approaches, failure analysis, etc. Contributions committed to the simulation of damage/fracture/failure of composite materials are also very welcome.

### REFERENCES

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[3] E. Barbieri, M. Meo, "A meshfree penalty-based approach to delamination in composites", *Composites Science and Technology*, 69 (13), 2169-2177