## PhD Position on modelling cracks in porous materials at University of Padova, Italy, with secondments at ETH Zurich and EPFL Lausanne

Call deadline: 8 March 2022, at 1 p.m. CET

In the framework of the Marie Skłodowska-Curie Action COFUND, the Doctoral Programme UNIPhD offers to the most talented Early Stage Researchers (ESRs) coming from all over the world a brand new International, Inter-sectoral, Inter-disciplinary and Innovative "training through research" programme <a href="https://www.unipd.it/en/uniphd">https://www.unipd.it/en/uniphd</a>.

Within this call, we are looking for a PhD student to collaborate with us on "Multiphysics modelling of thermal cracks in multiphase heterogenous porous materials". This research project aims to develop a numerical model able to study the nucleation and propagation of cracks induced by thermal effects in multiphase porous materials. The developed numerical model (UNIPD & ETH, Prof. Lorenzo Sanavia and Prof. Laura De Lorenzis, respectively) and the experimental measurements (EPFL, Prof. Lyesse Laloui) will allow a step forward on the interpretation of the multiphysics nature of the fracture in multiphase porous materials.

Supervisor: Prof. Lorenzo SANAVIA, <u>lorenzo.sanavia@unipd.it</u> Co-supervisor: Prof. Laura DE LORENZIS, <u>ldelorenzis@ethz.ch</u>

More information in the datasheet <a href="https://www.unipd.it/en/sites/en.unipd.it/files/STMS\_B.pdf">https://www.unipd.it/en/sites/en.unipd.it/files/STMS\_B.pdf</a> (see the #1\_Research\_Option\_Description) and the supervisors.

The call is announced at <a href="https://www.unipd.it/en/uniphd">https://euraxess.ec.europa.eu/jobs/746354</a>

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Lorenzo Sanavia (UNIPD Padova), <a href="mailto:lorenzo.sanavia@unipd.it">lorenzo.sanavia@unipd.it</a>

Laura De Lorenzis (ETH Zurich), <a href="mailto:ldelorenzis@ethz.ch">ldelorenzis@ethz.ch</a>