CIVIL AND ENVIRONMENTAL ENGINEERING

Ateneo - XFEM computational methods for multiscale problems

Funded By	Politecnico di TORINO [P.iva/CF:00518460019]

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Context of the research activity	The PhD Scholarship will develop XFEM multiscale numerical methods and their implementation into computer codes for enhanced simulations in application fields like glass and concrete mechanics, dynamic crack propagation and elastic wave propagation due to breaking phenomena in concrete or reinforcing steel.

Objectives	The PhD Scholarship will develop XFEM multiscale numerical methods and their implementation into computer codes for enhanced simulations in application fields like glass and concrete mechanics, dynamic crack propagation and elastic wave propagation due to breaking phenomena in concrete or reinforcing steel.

Skills and competencies for the development of the activity	Previous experience in computational mechanics, numerical methods, programming, development and implementation of XFEM formulations and XFEM computational codes