

Continuum damage modelling of dynamic fracture of quasi-brittle materials

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This project focuses on the dynamic failure of brittle materials with continuum damage models. We seek to

- achieve a fully regularized strain softening response
- capture the strain rate effect and crack bifurcation phenomenon
- describe the process with a continuous-to-discontinuous approach at low strain rates

We are seeking 1 Research Fellow for this project. The candidate should have a PhD in solid mechanics, mechanical engineering or any related field. Prior experience in at least one of the following areas is required

- Gradient / Phase-field damage models
- Homogenization theories, multi-scale methods
- Dynamic fracture modelling for brittle materials
- GFEM / XFEM, Remeshing techniques

The contract is for an initial period of 12 months, with possibility of extension. Salary package and benefits are competitive and commensurate with experience, see <http://www.nus.edu.sg/careers/whatyougettoenjoy.html>

To apply, please send a single pdf file including cover letter, CV, a full list of publications and the contact details of 2 references, to ceeph@nus.edu.sg