



## Dipartimento di Ingegneria Civile e Architettura Università degli Studi di Pavia

## A course on **Advanced numerical methods**

Organized within the European Joint Doctorate Program SEED

Goal of the course is to introduce students to some innovative computational methodologies, to possible related problematics, mathematical insights.

- Wednesday 19 September, morning
  - o Mixed methods: locking phenomena and mixed approach solutions (F. Auricchio)
  - Mixed methods: mathematical aspects (C.Lovadina)
- Wednesday 19 September, afternoon
  - Mixed methods: development of codes (G.Scalet)
- Thursday 20 September, morning
  - o The Virtual Element Method: an introduction (F.Brezzi)
  - o The Virtual Element Method: application to Stokes and Elasticity (L.Beirao)
- Thursday 20 September, afternoon
  - VEM: development of codes (A.Russo)
- Friday 21 September, morning
  - o Isogeometric Analysis: an introduction with applications (A.Reali, L.Tamellini)
- Friday 21 September, afternoon
  - o Isogeometric Analysis: mathematical aspects (G.Sangalli, M.Tani)





