Peridynamics and Beyond

- © 2023. 10. 26. (Thu), 16: 00~17:15
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Speaker

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Abstract

- The analysis of crack initiation and propagation in classical continuum theory faces challenges due to the difficulty in defining spatial derivatives on discontinuities
- Peridynamics offers an alternative approach to continuum mechanics by using integro-differential formulations to overcome the limitation
- Various forms of Peridynamics including bond-based and non-ordinary state-based approaches as well as coupling scheme will be explained
- Applications of Peridynamics for mechanics problems will be presented

The seminar will be in English.