

THE PARTICLE FINITE ELEMENT METHOD IN APPLIED GEOTECHNICAL ENGINEERING

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ABSTRACT

Applications based on the Particle-Finite Element Method (PFEM) are increasingly gaining traction as problem-solving tools in applied geotechnical engineering. Recent years have seen significant research contributions in areas such as deep and intermediate foundation design, geotechnical site investigation, dam breach, internal erosion, slope stability and stabilization technologies. This symposium intends to bring together a variety of perspectives on the topic, emphasizing the challenges derived from the applied perspective (data scarcity, regulatory obstacles, dimensionality, computational robustness, ...) and paving the way for a more streamlined research-to-practice transition.