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Nota di contenuto	Numerical investigation of the frequency influence on soil characteristics during vibratory driving of tubular piles -- Critical state theory for sand with fines: A DEM perspective -- Modelling the liquefaction behaviour of Sydney sand and the link between static and cyclic instability -- Numerical stability analysis of the abutment dam slopes using the key group -- An Enhanced Solution For The Expansion of Cylindrical Cavities In Modified Cam Clay -- 2D Spatial Variability Analysis of Sugar Creek Embankment: Comparative Study -- The influence of Rayleigh coefficients on numerical calculation in specific dynamic problems- Numerical Assessment of Ain-Tinn Slope Stability in Mila Province (Algeria) -- Stochastic Modeling of the Spatial Variability of Soil -- 3D- analysis of piled raft under the action of vertical and earthquake loads -- Scaling factors for generating p-y curve for liquefied soils from its stress-strain behaviour -- Finite

Element Analysis ofSub_Surface Settlements & Pile-Tunnel Interaction -- Evaluation of Design Parameters of Near Embankment Underground Tunnel Structure by Numerical Analysis of a 2D Plain Strain Model.

Sommario/riassunto

This volume deals with numerical simulation of coupled problems in soil mechanics and foundations. It contains analysis of both shallow and deep foundations. Several nonlinear problems are considered including, soil plasticity, cracking, reaching the soil bearing capacity, creep, etc. Dynamic analyses together with stability analysis are also included. Several numerical models of dams are considered together with coupled problems in soil mechanics and foundations. It gives wide range of modeling soil in different parts of the world. The volume is based on the best contributions to the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt 2018 – The official international congress of the Soil-Structure Interaction Group in Egypt (SSIGE).