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	Sommario/riassunto	Computational Challenges in the Geosciences addresses a cross-section of grand challenge problems arising in geoscience applications, including groundwater and petroleum reservoir simulation, hurricane storm surge, oceanography, volcanic eruptions and landslides, and tsunamis. Each of these applications gives rise to complex physical and mathematical models spanning multiple space-time scales, which

can only be studied through computer simulation. The data required by the models is often highly uncertain, and the numerical solution of the models requires sophisticated algorithms which are mathematically accurate, computationally efficient and yet must preserve basic physical properties of the models. This volume summarizes current methodologies and future research challenges in this broad and important field. .