

EarthScope Consortium Board of Directors

Ebru Bozdag - Colorado School of Mines

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I am an Associate Professor of Geophysics at Colorado School of Mines. I moved to Colorado from Nice where I was a Maître de Conférence (tenured Assistant/Associate Professor) and held a Chaire d'Excellence position at Université Côte d'Azur CNRS-Géoazur. I obtained my PhD in Seismology from Utrecht University, and before I started in Nice, I was an Associate Research Scholar at Princeton University, where I also did my postdoctoral studies.

My research centers around computational and global seismology. I primarily use 3D seismic wave simulations to study the solid Earth by linking observed data to advances in theory and numerical methods in multi-scale seismic wave propagation and optimization techniques with an emphasis on the global scale. My expertise lies in harmoniously combining high-performance computing (HPC) and large heterogeneous datasets to provide better constraints on the Earth's and other planetary interior and dynamics while training a new generation of seismologists with essential skills in the era of HPC/Cloud and big data. I have served on the IRIS Data Services Standing Committee and have been IRIS, then EarthScope, institutional representative of Colorado School of Mines since 2020. I have also been on the EarthScope-Oceans Standing Committee on Science since 2020. I am one of the PIs of the NSF-CSSI-funded SCOPED project to build a computational platform to facilitate large-scale, high-performance, and cloud computing-based research combined with large seismic datasets in collaboration with IRIS and CIG (Computational Infrastructure for Geodynamicists).

EarthScope Consortium presents excellent opportunities through the collaboration of the UNAVCO and IRIS communities to foster scientific discoveries addressing the present-day data and computational needs of geoscientists from instrumentation to storage and distribution of data to the community. I want to serve on the EarthScope Board of Directors to continue supporting and promoting data-driven scientific research and education with my expertise in large-scale computational and data projects aligned with the EarthScope mission, such as, but not limited to; 1) emerging data from new instruments and spatial domains in addition to the maintenance and distribution of the existing database, 2) data services synchronized with the needs of researchers and modern computational resources, 3) training and education of students and researchers in data and computational tools as well as outreach programs for the broader public, 4) diversity and inclusion within the community via research and training tools and opportunities.