

Wadia Institute of Himalayan Geology

33, GMS Road, Dehradun 248001, India



WIHG cordially invites you to the Distinguished Lecture

Title: Fault, shear zones and tectonic-metamorphic discontinuities in the metamorphic core of the Himalaya

Speaker: Prof. Rodolfo Carosi
Professor, University of Torino (Italy)

Date & Time: March 02, 2022 at 3:30 PM

Mode: Online

Meeting link (MS Team):

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NmM4MDZkODktYmVIYS00YWYwLWE3OWUtM2Q4OWVmZDU2YzE5%40thread.v2/0?context=%7b%22Tid%22%3a%226f2cdee4-bd84-4845-8998-38d601523cc4%22%2c%22Oid%22%3a%22465b39cd-fc7f-4c68-bcba-0861ce5b5138%22%7d



Summary of the Talk:

The mid-crust in the Himalayan belt stretches all over the 2400 km of length of the belt, has been considered for a long time as a coherent tectonic unit, exhumed by the contemporaneous shearing along the Main Central Thrust and the South Tibetan Detachment System in the time span ~25–17 Ma. A multidisciplinary approach allowed to better constrain its internal architecture characterized by several levels of tectonic-metamorphic discontinuities active since ~40 Ma that drove the exhumation of the metamorphic ore of the belt.

About the Speaker

Prof. Rodolfo Carosi is a renowned Geologist who is graduated from the University of Pisa (Italy). He did his Ph.D. in Geology from the University of Pisa. Presently he is a full professor at the University of Torino (Italy). Prof. Carosi specializes in structural geology and continental tectonics, with a special focus on the evolution of modern and ancient orogenic belts spanning from the Himalaya, the Ross Orogen (Antarctica), the Variscan belt in Europe, the Alps, and the Northern Apennines. Aims of his research include understanding the growth and collapse of orogens; continental transpression tectonics; deformations, metamorphism, and exhumation of deep-seated rocks; strain and kinematics of high-strain shear zones. Prof. Carosi expertise lies in Tectonics, Regional Geology (geological mapping and synthesis), and Structural Analysis. He carried out the structural evolution of the Higher Himalayan Crystallines and Tethyan sedimentary sequence in the central Himalaya, with emphasis on the models and timing of exhumation of the crystalline units. He is also involved in projects focussing on the Tectonic evolution of the Ross Orogen (Antarctica) and tectonic units in the Northern Apennines. He is the author of about 130 publications on peer review journals and several geological maps at various scales in different orogens.

