



## **Quaternary tectonic setting in the Apennine belt**

Enzo Mantovani (1), Marcello Viti (1), Daniele Babbucci (1), Caterina Tamburelli (1), and Nicola Cenni (2)

(1) Dip. Scienze Fisiche, della Terra e dell'Ambiente, Univ. di Siena, Italy (mantovani@unisi.it), (2) Dip. di Geoscienze, Univ. di Padova, Italy

It is argued that since the late Quaternary tectonic activity in the Apennines has been driven by belt-parallel compression, induced by the motion of the Adriatic plate. This regime has been accommodated by the uplift and outward extrusion of wedges in the outer sector of the belt. The relative oblique divergence between the outer (more mobile) belt and the inner one has generated a series of troughs in the axial chain. This interpretation can plausibly and coherently account for the major post early Pleistocene deformations recognized in the study area. Furthermore, the short term implications of the presumed present tectonic setting can be reconciled with the spatio-temporal distribution of major earthquakes in the last centuries. This feature could allow a tentative recognition of the zones most prone to next strong earthquakes in the belt.