



**UNIVERSITÉ
DE GENÈVE**

FACULTÉ DES SCIENCES

DÉPARTEMENT DE MINÉRALOGIE

SEMINAIRE DU DEPARTEMENT DE MINÉRALOGIE

Jeudi 26 mars à 13.00, salle 605

Dr. Thierry Sempere

Directeur de Recherche IRD, Univ. Paul Sabatier,
Toulouse

**New field insights into the evolution
of coastal southern Peru since the
Late Paleozoic**



Three main periods of unequal durations characterize the long-term evolution of coastal southern Peru:

- From the Late Paleozoic (~400? Ma) to the mid-Cretaceous (91 Ma), the margin dominantly underwent tectonic stretching, leading to the formation of a marine backarc basin.
- From the Late Cretaceous (91 Ma) to the mid-Oligocene (30 Ma), the magmatic arc was large enough to form a continuous relief, indicating incipient crustal thickening, and the backarc basin was mainly continental.
- The major crustal thickening typical of the Andean orogeny has built up from the mid-Oligocene (30 Ma) to the present, coinciding with a back-migration of the main arc toward the trench.