

### Geowissenschaftliches Kolloquium

# Meaning of pressure-temperature-time

## paths and implications for convergent

zones dynamics

#### Donnerstag, 23. Mai 2019 - 16.15 Uhr

Philippe Yamato Université de Renes I

Depending on the parageneses, the pressure-temperature (P-T) conditions experienced by rocks can be evaluated and quantified by using thermodynamic calculations. Time (t) is obtained by dating minerals associated with each paragenesis, considered at equilibrium. The resulting P-T-t paths are then used to constrain the tectonic history, most of the time, by assuming that the pressure recorded by metamorphic rocks directly reflects the reached depth. However, in regions where deformation is large



and heterogeneous such as in convergent zones, this above assumption is questionable.



**Philippe Yamato** is a professor in Tectonics at Rennes university and received a junior chair at the Institut Universitaire de France in 2017 for 5 years. His current scientific activities mainly focus on the understanding of the deformation of rocks at different scales both in space and time. The philosophy of his work is to quantify the physical processes by using numerical modelling.

### Institut für Geologische Wissenschaften

Großer Hörsaal (C.011), Haus C Malteserstrasse 74-100 12249 Berlin



www.geo.fu-berlin.de/geol/kolloquium