

Geowissenschaftliches Kolloquium

Early Archaean crustal reworking in the eastern Kaapvaal Craton

Donnerstag, 12. Juni 2014 - 16.15 Uhr

Alfred Kroener (Dept. of Geosciences, University of Mainz)

There is still much debate and controversy on the evolution of the early Earth, and much of the discussion is about the rates of crustal growth, reworking and recycling. This debate is intimately linked to the question of when plate tectonics began on Earth.

This talk will demonstrate from field relationships, zircon geochronology and Nd-Hf isotopes in the early Archaean gneiss-granite-greenstone terrain of the eastern Kaapvaal craton (3.66-3.2 Ga)

that recycling, reworking and structural interleaving of crustal rocks since the earliest Archaean led to obliteration of most original field relationships, and reconstruction of tectonic settings therefore remains ambiguous. It is likely that plate tectonic processes operated since the earliest Archaean and were already as diverse as seen on the modern Earth.



Prof. Alfred Kröner first studied in Germany and then obtained his PhD degree at the University of Cape Town, South Africa, in 1968. He joined the Precambrian Research Unit of the University of

Cape Town in 1969 and in 1977 became Professor of Geology at the University of Mainz from where he retired in 2006. He now continues his research as Visiting Professor of the Beijing SHRIMP Centre, Chinese Academy of Geological Sciences, Beijing. He has been involved in numerous studies on Precambrian rocks, specifically in southern and eastern Africa, and has published more than 350 research papers in international journals. He is basically a field geologist with particular interest in zircon geochronology and isotope geochemistry and tries to understand the evolution of the continental crust through earth history.



out: FUB GeoPal Medienbüro, Jan Evers 2014

Institut für Geologische Wissenschaften

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

