



## **Low-temperature rift and post-rift evolution of the southeastern Brazil continental margin -apatite fission-track thermochronology of the Ponta Grossa Arch -**

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In southeast Brazil, the South American landscape is formed by a complex syn- to post-rift tectono-morphological evolution. Major events are the reactivation of the exhumation of the Serra do Mar and Serra da Mantiqueira Mountain range, the formation of the South American surface and NE-SW trending Cenozoic rift basins. In addition, alkaline magmas intrude metamorphic and sedimentary basement rocks in Cretaceous time. The Ponta Grossa Arch is a NW-trending anticline connecting the Paraná sedimentary basin with the South Atlantic offshore basins. Main lithological units are Precambrian metamorphic rocks discordantly overlain by Palaeozoic sedimentary rocks. The poster will present evidence for a long-term exhumation history since the rift phase. Three major thermal and exhumation events can be distinguished on the base of apatite fission-track thermochronological data and t-T modelling.