

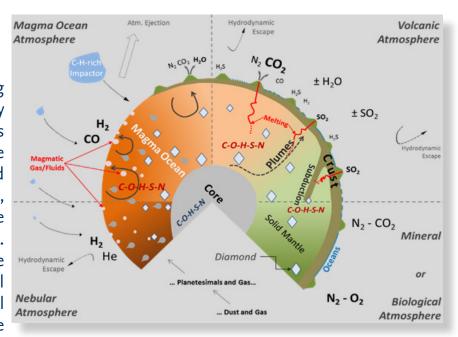
Geowissenschaftliches Kolloquium

Can we define magmatic processes building habitable worlds? An analysis from the earliest magma ocean to coldest magmatic stages

Donnerstag, 10. Januar 2019 - 16.15 Uhr

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Volcanism is an enduring process featuring most planetary systems. Chemical components from the planetary interior are collected by the magma formed by partial melting and then, conveyed to the surface where volcanic degassing occurs. Volcanoes are the pipeline connecting deep to surficial chemistries. On Earth, surficial waters, sulfur and carbon have



probably been outgassed by this pipeline, though, the deep mantle remains the main H, S and processes. C reservoirs. I will expose the current knowledge on this planetary processes.



Dr. Fabrice Gaillard is an experimentalist, specialized in high pressure high temperature methods, with consolidated background in chemical thermodynamics. His research activities tackle volatile species and § magmatic systems on Earth and elsewhere: how it impacts on deep geodynamics via mantle/crust melting and how it affects surficial geochemistry via volcanic degassing.

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