

Chaire de Physique de l'Intérieur de la Terre
"Structure et dynamique du manteau profond de la terre"

Références bibliographiques - Leçon no 6

- Antonangeli, D., J. Siebert et al (2011) Spin crossover in Ferropericlase at high Pressure: a seismologically transparent transition?, *Science*, 331, 64-66
- Badro, J. et al (2003) Iron partitioning in Earth's mantle: toward a deep lower mantle discontinuity. *Science* 300, 789--791.
- Badro, J. et al. (2004) Electronic transitions in perovskite: possible nonconvecting layers in the lower mantle. *Science* 305, 383--386
- Bower, D.J., Wicks, J.K., Gurnis, M., Jackson, J.M., 2011. A geodynamic and mineral physics model of a solid-state ultralow-velocity zone. *Earth and Planetary Science Letters* 303, 193–202.
- Catalli et al. (2010) Spin state of ferric iron in MgSiO₃ perovskite and its effect on elastic properties, *Earth Planet. Sci. Lett.*, 289, 68-75.
- Davaille A., E. Stutzmann et al. (2005) Convective patterns under the Indo-Atlantic 'box', *Earth Planet. Sci. Lett.*, 239, 233-252.
- Deschamps and Tackley (2009) Searching for models of thermo-chemical convection that explain probabilistic tomography. II—Influence of physical and compositional parameters, *Phys. Earth Planet. Int.*, 176, 1-18.
- Fiquet, G., A. Auzende et al. (2010) Melting of Peridotite to 140 Gigapascals, *Science*, 329, 1516.
- Lassak, T.M., McNamara, A.K., Garnero, E.J., Zhong, S., 2010. Core–mantle boundary topography as a possible constraint on lower mantle chemistry and dynamics. *Earth and Planetary Science Letters* 289, 232–241.
- Le Bars, M. and A. Davaille (2004) Whole-layer convection in an heterogeneous planetary mantle,, *J. Geophys. Res.* 109 (2004), [doi:10.1029/2003JB002617](https://doi.org/10.1029/2003JB002617).
- Lin, J-F, V. Struzhkin et al. (2005) Spin transition of iron in the Earth's lower mantle, *Nature*, 436, 377-379.
- Lin et al. (2005) Spin transition zone in Earth's lower mantle, *Science*, 317, 1740.
- McNamara, A. and S. Zhong (2005) Thermochemical structures beneath Africa and the Pacific Ocean, *Nature*, 437, 1136-1139.

McNamara, A., E. Garnero and S. Rost (2010) Tracking deep mantle reservoirs with ultra-low velocity zones, *Earth Planet. Sci. Lett.*, 299, 1-9.

Nakagawa, T. and P.Tackley (2010) Influence of initial CMB temperature and other parameters on the thermal evolution of Earth's core resulting from thermochemical spherical mantle convection, *G-cubed*, 11, Q06002.

Ricolleau et al. (2010) Phase relations and equation of state of a natural MORB: Implications for the density profile of subducted oceanic crust in the Earth's lower mantle, *J. Geophys. Res.*, 115, B08202

Tackley, P. J. (2011) Living dead slabs in 3-D: The dynamics of compositionally-stratified slabs entering a “slab graveyard” above the core-mantle boundary, *PHys. Earth. Planet. Inter.*, 188, 150-162.

Tackley, P. (2012) Dynamics and evolution of the deep mantle resulting from thermal, chemical, phase and melting effects, *Earth Planet. Sci. Lett.*, 110, 1-25.

Tan, E. and M. Gurnis (2007) Compressible thermochemical convection and application to lower mantle structures, *J. Geophys. Res.*, 112, B06304.