



TimeMan 2021



Tuesday 7 December 2021 (Chair: S. Demouchy)

13:50-14:00: Patrick Cordier (ULille) Welcome

14:00-14:20: Patrick Cordier (ULille) "Stress-induced amorphization: an emerging deformation mechanism"

14:20-14:40: Patrick Cordier aka Hosni Idrissi (UCLouvain & EMAT) "Shear induced amorphization of olivine: *ex situ* TEM investigation"

14:40-15:00: Ihtasham Ul Haq (EMAT) "A quantitative analysis of *in situ* grain boundary sliding mechanism in forsterite"

15:00-15:20: Michael Coulombier (UCLouvain) "Lab-on-Chip applied to amorphous olivine "

15:20-15:40: Andrey Orekhov (EMAT) "Plasticity of amorphous olivine thin films *in situ* in the TEM"

15:40-16:00: Ankush Kashiwar (EMAT) "Structural investigations on amorphous to crystalline transition in olivine by advanced *in situ* TEM techniques"

16:00-16:20: Break

16:20-16:50: Guillaume Kermouche (Mines Saint Etienne) "Micromechanical tests and associated constitutive models to describe plastic flow of silicate glasses"

16:50-17:10: Valentin Delbecq (ULille) "Numerical study of mechanical properties of Mg₂SiO₄ glasses"

17:10-17:40: Remi Daudin (SIMAP) "Amorphous metallic alloys at SIMAP: processing, properties and advanced characterization"

Wednesday 8 December 2021 (Chair: J.P. Raskin)

9:00-9:20: Frederik Van Loock & Thomas Pardoën (UCLouvain) "Mesoscale model for amorphous plasticity based on shear transformation dynamics"

9:20-9:40: Jean François Paul (ULille) "Reaction coordinates for complex transformations : application to ice and alumina phase transition"

9:40-10:00: Alex Pip (UCLouvain) " Development of nanoscale thermo-tensile testing devices for *in situ* TEM experiments"

10:00-10:20: Pierre Hirel (ULille) " Grain boundaries in MgO: effects of vacancies and stress"

10:20-10:50: Break

10:50-11:10: Jean Furstoss (ULille) " Structures and properties of a particular symmetrical tilt grain boundary in forsterite"

11:10-11:30: Timmo Weidner (ULille) "Evidence of dislocation climb in quartz by electron tomography"

11:30-11:50: Philippe Carrez (ULille) "Interaction between dislocations and point defects in MgO"

11:50-12:10: Patrick Cordier (ULille) "Creep in the lower mantle"