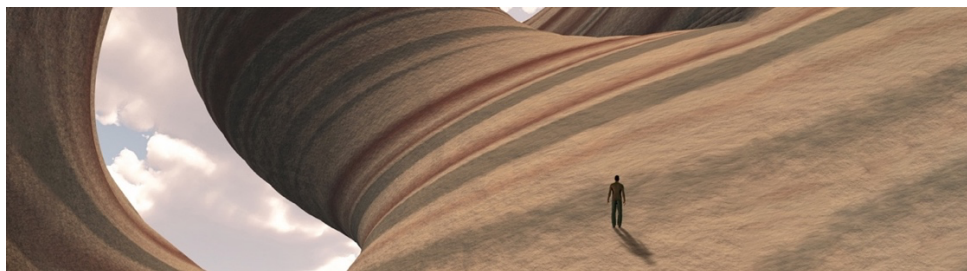




## TimeMan 2024



**Universiteit Antwerpen**

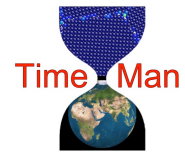


**Groenenborger campus, Groenenborgerlaan 171, Antwerp**

**Lecture room U.024**

**Wednesday 11 September 2024**

|             |                         |                                                                                                                            |                    |
|-------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------|
| 13:00       | Welcome with sandwiches |                                                                                                                            | Chair: S. Demouchy |
| 13:45-14:00 | P. Cordier              | Welcome and introduction                                                                                                   |                    |
| 14:00-14:30 | R. Dohmen               | Silicate thin films produced by pulsed laser deposition: Properties and applications                                       |                    |
| 14:30-14:45 | P. Cordier              | Stress-induced amorphization                                                                                               |                    |
| 14:45-15:15 | P. Carrez               | Effect of iron on ultimate mechanical properties of olivine                                                                |                    |
| 15:15-15:45 | J. Furstoss             | Stress induced amorphization is a transformation induced plasticity                                                        |                    |
| 15:45-16:15 | A. Kashiwar             | In situ TEM studies of the microscopic mechanisms of crystallization in olivine                                            |                    |
| 16:15-16:45 | Break                   |                                                                                                                            | Chair: H. Rattez   |
| 16:45-17:15 | S. Demouchy             | Ductile deformation of natural olivine: Insights from Hawaii                                                               |                    |
| 17:15-17:45 | T. Weidner              | Mixed Climb in Minerals                                                                                                    |                    |
| 17:45-18:15 | C. Traisnel             | First-principles study of charged point defects properties in forsterite                                                   |                    |
| 18:15-18:45 | L. Delannay             | Heterogeneity of microscopic strain and grain rotation in the rheology of grain boundary sliding accommodated by diffusion |                    |
| 19:30       | Dinner                  |                                                                                                                            |                    |



### Thursday 12 September 2024

Chair: N. Gauquelin

|             |            |                                                                                                 |
|-------------|------------|-------------------------------------------------------------------------------------------------|
| 9:15-10:00  | E. Tochigi | Atomic scale observations of notch tip under tensile stress                                     |
| 10:00-10:30 | H. Idrissi | Electron beam induced viscoplasticity in Al/Al <sub>2</sub> O <sub>3</sub> /Al tri-layer system |
| 10:30-11:00 | A. Orekhov | Advanced denoising and precise sample shape tracking in PTP data processing                     |

11:00-11:30 Break

Chair: A. Béch 

|             |               |                                                                                                                 |
|-------------|---------------|-----------------------------------------------------------------------------------------------------------------|
| 11:30-12:00 | T. Pardoen    | Last progress about on chip test methods                                                                        |
| 12:00-12:30 | M. Coulombier | Towards HTOC in situ TEM                                                                                        |
| 12:30-13:00 | M.S. Colla    | New developments of the residual stress actuated on-chip testing method: coupled effects and strain engineering |

13:00 Lunch

Chair: P. Carrez

|             |            |                                                                           |
|-------------|------------|---------------------------------------------------------------------------|
| 14:00-14:30 | P. Hirel   | Plasticity of SrTiO <sub>3</sub> perovskite: what simulations can tell us |
| 14:30-15:00 | I. Ul Haq  | Nanomechanical tensile testing of talc: dislocation vs. amorphization     |
| 15:00-15:30 | G. Tiph ne | In-situ HT nanoindentation to quantify recovery kinetics in pure metals   |

15:30-16:00 Break

Chair: N. Schryvers

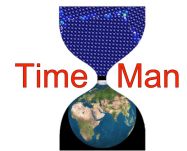
|             |                |                                                                                                                                         |
|-------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 16:00-16:30 | O. Castelnau   | Nonlinear homogenization of polycrystalline aggregates                                                                                  |
| 16:30-17:00 | G. Materzanini | Role of the electron irradiation on the plasticity of amorphous Al <sub>2</sub> O <sub>3</sub> : atomistic simulations meet experiments |
| 17:00-17:15 | P. Cordier     | Closing words                                                                                                                           |

19:00-22:00 Dinner Faculty Club, Hof van Liere, Prinsstraat 13b, 2000 Antwerp

### Friday 13 September 2024 - Morning

10:00-12:00 Lab tour: EMAT with intro on Nanolab Centre of Excellence and Valorisation @ EMAT

12:00 Closing with sandwiches



### Participants:

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