

**Journée scientifique WP5 du Labex DAMAS,  
le Mercredi 24 février 2016 (Metz, Salle Klepaczko, LEM3)  
Multiscale Modelling**

**30 minutes max. for each talk scheduled in the WP5 meeting including discussion**

**Les talks seront en anglais ou en français.**

**En jaune: title to confirm (présence déjà confirmée)**

**En bleu: Talk to confirm**

**9H00-9H30: Accueil**

**9h30-10h00 : Task 1**

**9h30-10h00: J-M. Raulot: Atomistic simulations (Ti alloys and interaction solutes / GB)**

**10h00-11h00: Task 2**

**10h00-10H30: H. Zahrouni: FE2 method for thin structures (shared with WP4)**

**10h30-11h00: E.M. Daya: Analyse à deux échelles des vibrations des structures sandwich metal/polymère à forme repetitive (WP5 shared with WP1)**

**11h00-12h00 Task 3**

**11h00-11h30: C. Fressengeas and V. Taupin: Field fracture mechanics and applications**

**11h30-12h00: K.S. Djaka (PhD student): A numerical FFT approach to solve dislocation density transport / annihilation and mechanical fields with heterogeneous elasticity**

**12h00-14h00: Lunch (CROUS RU Metz Saulcy)**

**14h00-14h30 Task 3 (cont'd)**

14h00-14h30: A. Villani (post doc): FFT technique in crystalline elasto- plasticity and conjugate gradient techniques

#### **14h30-Task 4**

14H30-15H00: S. Berbenni: Micromechanical and homogenization models for primary and double twinning in AZ31 Mg alloys.

15h00-15h30: S. Berbenni, T. Richeton: Incompatibility stresses calculations due to grain boundaries in light weighing Ti alpha/beta alloys (shared with WP2: L. Germain/N. Gey ) (to confirm if presented in WP2 OR WP5)

#### **15h00- Task 5**

15h00-15h30: M. Zaloznik : Mesoscopic modelling in solidification (Shared with WP2)

**15H30-16H30 : Pause - Round table discussion and discussion around new projects**

**16h30 : End**