



## Atlantis STARS Meeting in Brussels

**Subject:** STARS (Atlantis) project meeting  
**Participants:** Charles Bostater (FIT)  
Yvan Baudoin (RMA)  
Bálint Kiss (BME)

Date: 30 - 31 March 2009

Location: Belgium, RMA and CPA

### Kevin Hernacki's semester in Brussels

1. Kevin is the first US student in the framework of this project.
2. Arrival to Brussels: September 1<sup>st</sup>; end of semester: December 18<sup>th</sup>; examination and thesis defense: January 2010, the week 11-15 January (the next week is not available to Yvan).
3. Kevin's topic in Brussels: sensor guided mobile robot (construction and programming). Yvan will send a description of the topic to Bálint which goes to the website. In addition, the description of previous work can be sent to Bálint to forward it to Kevin. This program will also go to Sam Kozaitis who is Kevin's advisor.
4. Kevin's courses in Brussels:
  - a. Mechatronics: The course contain lecture in English, lab environment in French but help in English.
  - b. EL007: Signals, systems, optics and radars: in French and help in English in case of difficulties
5. Accommodation
  - a. Off-campus (300 EUR/month + transportation) – La Tour de Freins, Ucll.
  - b. On-campus (80 EUR/month) – not sure to have place there
6. French knowledge check for Kevin:
  - a. abstract in French for the thesis
  - b. read and translate of a French language paper

### Maté Nemes' case

1. FIT needs more time to evaluate BME students' background. All colleges need to make an evaluation of the courses belonging to their competences and whence the program plan is put together.
2. Therefore the two Hungarian students need to present their application asap.

### Two US students for the academic year 2009/2010

1. The courses they can have at the RMA are put in the program plan.
  - a. **OM004 - Electro-optical sensors:** basic notions, laser, military application of lasers, laser and security, night vision systems, radars and applications, mono and stereo vision with digital cameras; labs: radar antennas, radar systems, demonstrations, helmet mounted night vision systems.
  - b. **MS008 – Mechatronics:** kinematics and dynamics of mobile robots: multi-wheel propulsion, legged locomotion; actuation of automated mechanisms: hydraulic,



pneumatic, electrical; control of mobile robots; military uses of mobile robots; Project

- c. **CL 01x – English-French:**
  - d. **EL007 – Teledetection:** different sweeping techniques, spectral characteristics of sensors from a user’s perspective, radar imaging, raw image processing, low level image processing, image compression
2. Stephen Whitaker will study FI001 *Citizenship* at the RMA. The description of that course needs to be sent to Chuck by Yvan for evaluation.
  3. The two students (Stephen Whitaker and William Harwood) require the topic “Realization of a measurement bench to measure the signature of antipersonnel mines in the metal detector frequency band”. Xavier Neyt at the RMA would supervise them during their stay at the RMA.

### **Faculty mobility:**

1. We are at ~20% of the student effective which is behind the schedule. We can use approximately 20% of the faculty mobility. This would be 2 faculty staff for a shorter stay from RMA and 2 faculty persons for a longer stay from the BME during 2009.
2. The 2 persons from the BME would teach a summer class in Control Engineering.
3. The 2 persons from the RMA would go to the FIT to give sample courses and seminary lectures during the fall semester 2009 – Socrates-like mobility.

### **Others:**

1. The topic “Theoretical kinematical study of 4x4 wheeled robots...” is canceled from the list of Senior design project list.
2. Applications for EU students starting their studies in the US in September should arrive by the end of February.
3. Applications for EU students starting their studies in the US in January should arrive by the end of September.
4. US students would need a draft program plan about two weeks after they submit their flowchart. For, they have to anticipate the list of courses they will complete until the start of their mobility period.