

**Designing, Implementing and Running  
Agent-Based Models for Renewable Resources Management**  
Sept. 17-28, 2012 - Montpellier

**Tentative programme**

Monday 17th (10:00am – 5:00pm)

- Welcome
  - Participant introductions
  - **Lecture:** Introduction to modeling in NRM
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- **Lecture:** Multi-agent systems: principles, origins, functioning  
(with demos of didactic models)

Tuesday 18th (08:30am – 5:00pm)

- **Lecture:** Designing a conceptual model (Ontologies, UML static)
  - Exercises
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- Introduction of a **Red Thread Model (RTM)**
  - Working Groups to design a UML class diagram (**RTM**)
  - Working Groups Feedback / Synthesis

Wednesday 19th (08:30am – 5:00pm)

- **Lecture:** UML dynamic (activity, state-transition diagrams)
  - Working Groups to design a UML activity diagram (**RTM**)
  - Working Groups Feedback / Synthesis
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- **Lecture:** UML sequence diagram, simulation scheduling
  - Working Groups to design a UML sequence diagram (**RTM**)
  - **Participants' Prototype Models (PPMs)** => Setting-up

Thursday 20th (08:30am – 5:00pm)

- **PPMs** => Designing conceptual models
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- **PPMs** => Designing conceptual models
  - **PPMs** => Presentations (issues/questions/UML class diagrams)

Friday 21st (08:30am – 5:00pm)

- Demonstration of **RTM** implementations with **NetLogo, Cormas**
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- Demonstration of **RTM** implementation with **Mimosa**
  - Discussion on platforms
  - **Lecture:** How to describe and communicate an agent-based model?  
The ODD protocol

Monday 24th (08:30am – 5:00pm)

- **Lecture:** The Companion Modeling approach
- **Hands on NetLogo / PPMs => Implementation**

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- **Hands on Cormas / PPMs => Implementation**
- **Hands on Mimosa / PPMs => Implementation**

Tuesday 25th (08:30am – 5:00pm)

- **Lecture:** Case study
- **Mastering NetLogo / Cormas / Mimosa (1/2)**

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- **Mastering NetLogo / Cormas / Mimosa (2/2)**
- **PPMs => Implementation**

Wednesday 26th (08:30am – 5:00pm)

- **Role-playing game session**

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- **Summer School Lunch**

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- **PPMs => Implementation**

Thursday 27th (08:30am – 5:00pm)

- **Lecture:** Case study
- **PPMs => Implementation**

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- **PPMs => Implementation**

Friday 28th (08:30am – 13:00pm)

- **PPMs => Implementation**
- **PPMs => Presentations**