

Public Seminar Friday 13th September 2005- 11.00 am
Venue: CSIRO Davies Laboratory Seminar Room.
For further details please contact Di Popham (07) 4753 8597.

Companion Modelling for Integrated Water Management Issues

Olivier Barreteau is a French scientist working on Companion Modelling for integrated water management issues.

Olivier started his carrier in hydrology and engineering (MSc in hydrology). His PhD theses investigated coordination patterns of farmers in Senegalese irrigated systems, using Agent Based Simulations, and was done within Cirad's GREEN interdisciplinary team. With François Bousquet and others, the team introduced Companion Modelling technique, Role Playing Games that improve the communication with stakeholders.

Since 1999, Olivier has worked at Cemagref, French Research Institute of Environmental and Agricultural Engineering. His main area of interest is complex system modelling and dialogue support for water management issues. Since 2005, he is in charge of Cemagref's team for water governance and tools to facilitate governance.

Recent publication list: :

Barreteau O. (2003). « The joint use of role-playing games and models regarding negotiation processes: characterization of associations ». *Journal of Artificial Societies and Social Simulation* **6** (2). <http://jasss.soc.surrey.ac.uk/6/2/3.html>

Barreteau, O., Abrami, G., Chennit, S. (2004). Combining various time scales though joint use of Agent Based Modelling and Role Playing Games: application to a river basin management game. In *ISAGA'2004*, Munich

Barreteau, O. and F. Bousquet (2000). "SHADOC: a Multi-Agent Model to tackle viability of irrigated systems." *Annals of Operations Research* **94**: 139-162

Barreteau, O., F. Bousquet and J.-M. Attonaty (2001). "Role-playing games for opening the black box of multi-agent systems: method and lessons of its application to Senegal River Valley irrigated systems." *Journal of Artificial Societies and Social Simulation* **4**(2). <http://jasss.soc.surrey.ac.uk/4/2/5.html>

Barreteau O., Garin, P., Dumontier, A., Abrami, G., Cernesson, F. (2003). « Agent based facilitation of water allocation : case study in Drome river valley ». *Group Decision Negotiation*, 12 (5) : 441-461.

Bousquet F., **Barreteau O.**, d'Aquino P; Etienne M., Boissau S., Aubert S., Le Page C., Babin D., Castella J.-C., 2002 - Multi-agent systems and role games : an approach for ecosystem co-management. In *Complexity and Ecosystem Management: The Theory and Practice of Multi-agent Approaches*, edited by M. Janssen: Edward Elgar Publishers. Pp. 248-285