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## PASCAL REDOU : PUBLICATIONS

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<i>Année</i>	Art. Int.	Conf. Int.	Conf. Nat.	Autres	Total
<b>2015</b>		1			1
<b>2013</b>	1	1			2
<b>2012</b>				1	1
<b>2011</b>	1	1			2
<b>2010</b>	2	1			3
<b>2009</b>	2	1	1		4
<b>2008</b>			1		1
<b>2007</b>	1	5	2	1	9
<b>2006</b>	1				1
<b>2005</b>	1	1			2
<b>2004</b>					0
<b>2003</b>	2				2
<b>Total</b>	11	10	4	2	28

### **Articles dans une revue internationale avec comité de lecture**

1. Belemaalem, Zakaria and **Redou, Pascal** and Parenthoen, Marc. (2013) Solving Partial Differential Equations with Chaotic Asynchronous Schemes in Multi-Interaction Systems. *Journal of Modern Mathematics Frontier* 2(4) :129–140.
2. Rodin, Vincent and Desmeulles, Gireg and Ballet, Pascal and **Redou, Pascal** and Le Gal, Christophe. (2011) An efficient algorithm based on weak synchronization for distributed in virtuo biological experiments. *Multiagent and Grid Systems, IOS Press* 7(4-5) :159–182.
3. **Redou, Pascal** and Gaubert, Laurent and Desmeulles, Gireg and Béal, Pierre-Antoine and Le Gal, Christophe and Rodin, Vincent. (2010) Absolute Stability of Chaotic Asynchronous Multi-Interactions Schemes for Solving ODE. *CMES : Computer Modeling in Engineering & Sciences*, 70(1) : 11–40.
4. Gaubert, Laurent and **Redou, Pascal**. (2010) Synchronization of Asymptotically Periodic Behaviors In Countable Cellular Systems. *Journal of Non-linear Systems and Applications*, 1(1) : 1–12.
5. Desmeulles, Gireg and Bonneau, Stéphane and **Redou, Pascal** and Rodin, Vincent and Tisseau, Jacques. (2009) In virtuo Experiments Based on the Multi-Interaction System Framework : the RéISCOP Meta-Model. *CMES, Computer Modeling in Engineering & Sciences*.
6. Gaubert, Laurent and **Redou, Pascal** and Tisseau, Jacques. (2009) Frequency Locking in Tissular Coupling. *Dynamics of Continuous, Discrete and Impulsive Systems Series B : Applications & Algorithms*, 16(3) : 453–470.

7. Gaubert, Laurent and **Redou, Pascal** and Harrouet, Fabrice and Tisseau, Jacques. (2007) A first mathematical model of brood sorting by ants : Functional self-organization without swarm-intelligence. *Ecological Complexity*, 4(4) : 234–241.
8. Desmeulles, Gireg and Querrec, Gabriel and **Redou, Pascal** and Misery, Laurent and Rodin, Vincent and Tisseau, Jacques. (2006) The Virtual Reality applied to the biology understanding : the in virtuo experimentation. *Expert Systems with Applications*, 30(1) : 82–92.
9. **Redou, Pascal** and Kerdelo, Sébastien and Le Gal, Christophe and Querrec, Gabriel and Rodin, Vincent and Abgrall, Jean-François and Tisseau, Jacques. (2005) Reaction agent : first mathematical validation of a multi-agent system for dynamical biochemical kinetics. *Lecture Notes in Computer Science*-Springer, 3808 : 156–166.
10. **Redou, Pascal**. (2003) Representations of the conformal Lie algebra in the space of tensor densities on the sphere. *Journal of Nonlinear Mathematical Physics*, 10 : 136–140.
11. **Redou, Pascal** and Ovsienko, Valentin. (2003) Generalized Transvectants-Rankin-Cohen Brackets. *Letters in Mathematical Physics*, 63 : 19–28.

**Conférences internationales avec comité de lecture et publication des actes**

12. Le Yaouanq, Sébastien and Le Gal, Christophe, and **Redou, Pascal** and Tisseau, Jacques. (2015) Co-Simulation of Redundant and Heterogeneous Modelling Scales for a Phenomenological Approach. In *APSAC, applied physics, simulation and computers*, Vienna, March 2015.
13. Crépin, Laurent and Harrouet, Fabrice and Kerdelo, Sébastien and Tisseau, Jacques and **Redou, Pascal**. (2013) Computational Methods for the Parallel 3D Simulation of Biochemical Kinetics at the Microscopic Scale. In *Lecture notes in computer science, proceedings of the 9th International Symposium on Bioinformatics Research and Applications*, pages 28–39, Charlotte, USA.
14. Le Yaouanq, Sébastien and **Redou, Pascal** and Le Gal, Christophe and Abgrall, Jean-François and Tisseau, Jacques. (2011) Multi-Agent Systems and Heterogeneous Scales Interactions. Application to Pharmacokinetics of Vitamin K Antagonists. In *Advances in Artificial Life, ECAL 2011*, pages 447–455, Paris, France.
15. Desmeulles, Gireg and Rodin, Vincent and **Redou, Pascal** and Roudot, Alain-claude. (2010) A new PBTK modelling method based on multi interaction paradigm. In *FOODSIM'2010 proceedings*, pages 154–157, Bracanga, Portugal.
16. Chevallier, Pierre and Bonneaud, Stéphane and Desmeulles, Gireg and **Redou, Pascal**. (2009) Experimental Study of Agent Population Models with a Specific Attention to the Discretization Biases. In *Proceedings of the European Simulation and Modelling Conference, ESM'09, EUROSIS, The European Simulation Society. AI-Akaidi, M. (ed.)*, pages 323–331, Leicester, United Kingdom.

17. **Redou, Pascal** and Kerdélo, Sébastien and Desmeulles, Gireg and Abgrall, Jean-François and Rodin, Vincent and Tisseau, Jacques. (2007) Formal validation of asynchronous interaction-agents algorithms for reaction-diffusion problems. In *PADS'07, 21st International Workshop on Principles of Advanced and Distributed Simulation/Proceedings*, pages 26–34, San Diego, California, USA.
18. Gaubert, Laurent and **Redou, Pascal** and Tisseau, Jacques. (2007) Frequency locking in tissular coupling part 1 : finite population. In *EPNACS'2007 - Emergent Properties in Natural and Artificial Complex Systems*, pages 121–132, Dresden, Germany.
19. Gaubert, Laurent and **Redou, Pascal** and Tisseau, Jacques. (2007) Frequency locking in tissular coupling part 2 : infinite compact connected population. In *EPNACS'2007 - Emergent Properties in Natural and Artificial Complex Systems*, pages 133–140, Dresden, Germany.
20. Bonneaud, Stéphane and **Redou, Pascal** and Chevaillier, Pierre. (2007) Pattern-oriented agent-based multi-modeling of exploited ecosystems. In *Proceedings of the 6th EUROSIM Congress on Modelling and Simulation*, pages 61–68, Ljubljana, Slovenia.
21. Bonneaud, Stéphane and Blanchard, Fabian and Chevaillier, Pierre and Thébault, Damien and **Redou, Pascal**. (2007) A model of fish population dynamics based on spatially explicit trophic relationships. In *European Conference on Ecological Modelling ECEM'07*, Trieste, Italia.
22. Desmeulles, Gireg and **Redou, Pascal** and Misery, Laurent and Rodin, Vincent. (2005) A Multiagent and Multimodel Approach for the experimentation on Biological Complex Systems. In *WMSCI'2005, 9th World Multi-Conference on Systemics, Cybernetics and Informatics*, Volume VI, Orlando, Florida, USA.

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23. Bonneaud, Stéphane and **Redou, Pascal** and Desmeulles, Gireg and Chevaillier, Pierre. (2009) Biais computationnels dans les modèles de peuplements d'agents. In *Actes des 17ème Journées Francophones sur les Systèmes Multi-Agents (JFSMA09)*, Guessoum, Z & Hassa, S. (ed.), pages 145–154, Lyon, France.
24. Ballet, Pascal and **Redou, Pascal**. (2008) An applied multiagent approach for metabolism modelling. In *Proceedings of the Lille Spring School on Modelling Complex Biological Systems in the Context of Genomics*, Lille, France.
25. Gaubert, Laurent and **Redou, Pascal** and Harrouet, Fabrice and Tisseau, Jacques. (2007) Analyse mathématique du tri du couvain par les fourmis : auto-organisation fonctionnelle dénuée d'intelligence collective. In *Actes des 15ème Journées Francophones sur les Systèmes Multi-Agents (JFSMA07)*, Guessoum, Z & Hassa, S. (ed.), pages 13–22, Carcassonne, France.
26. Bonneaud, Stéphane and **Redou, Pascal** and Thébault, Damien and Chevaillier, Pierre. (2007) Agents-Modèles pour la co-construction de simulations multi-modèles - Application aux écosystèmes exploités. In *Actes des 15ème*

*Journées Francophones sur les Systèmes Multi-Agents (JFSMA07), Guessoum, Z & Hassa, S. (ed.).*, pages 119–128, Carcassonne, France.

**Brevet**

27. Tisseau, Jacques and Harrouet, Fabrice and **Redou, Pascal** and Kerdélo, Sébastien. (2007) Device for simulation of the real world by asynchronous and chaotic processing. Patents US2007156381 (2007-07-05), EP1706834 (2006-10-04), WO2005081141 (2005-09-01), CA2552821 (2005-09-01), FR2865297 (2005-07-22). ENIB, cervVAL, 2007.

**Poster**

28. Crépin, Laurent and Harrouet, Fabrice and Kerdélo Sébastien and **Redou, Pascal**. (2012) 3D microscopic scale simulation of biochemical kinetics. European Conference on Computational Biology (ECCB 2012). Poster.