Liste de publications de Blaise Faugeras

dernière mise à jour: 18/07/2008

Articles dans des journaux

[1] B. Faugeras and O. Maury. Modelling fish population movements: from an individual-based representation to an advection-diffusion equation. *J. Theor. Biol.*, 247:837–848, 2007.

[2] O. Maury, B. Faugeras, Y-J. Shin, J.C. Poggiale, T. Ben Ari, and F. Marsac. Modeling environmental effects on the size-structured energy flow through marine ecosystems. part 1: the model. *Progress in Oceanography*, 74:479–499, 2007.

[3] O. Maury, Y-J. Shin, B. Faugeras, T. Ben Ari, and F. Marsac. Modeling environmental effects on the size-structured energy flow through marine ecosystems. part 2: simulations. *Progress in Oceanography*, 74:500–514, 2007.

[4] B. Faugeras, J. Pousin, and F. Fontvieille. An efficient numerical scheme for precise time integration of a diffusion-dissolution/precipitation chemical system. *Math. of Computation*, 75(253):209–222, 2006.

[5] B. Faugeras and O. Maury. An advection-diffusion-reaction size-structured fish population dynamics model combined with a statistical parameter estimation procedure: Application to the Indian Ocean skipjack tuna fishery. *Math. Biosciences and Engineering*, 2(4):719–741, 2005.

[6] O. Maury, B. Faugeras, and V. Restrepo. FASST: A Fully Age-Size and Space-Time structured statistical model for the assessment of tuna populations. *ICCAT Coll. Vol. Sci. Pap.*, 57(1):206–217, 2005.

[7] B. Faugeras and O. Maury. A multi-region nonlinear age-size structured fish population model. *Nonlinear Analysis: Real World Appl.*, 6(3):447–460, 2005.

[8] B. Faugeras, O. Bernard, A. Sciandra, and M. Lévy. A mechanistic modelling and data assimilation approach to estimate the carbon/chlorophyll and carbon/nitrogen ratios in a coupled hydrodynamical-biological model. *Nonlinear Processes in Geophysics*, 11(4):515–533, 2004.

[9] B. Faugeras and J. Pousin. Variational asymptotic derivation of an elastic model arising from the problem of 3D automatic segmentation of cardiac images. *Analysis and Applications (AA)*, 2(4):275–307, 2004.

[10] B. Faugeras. On the well-posedness of a coupled one-dimensional biological-physical model for the upper ocean. *Mathematical Models and Methods Applied Sciences*, 8(13):1157–1184, 2003.

[11] B. Faugeras, M. Lévy, L. Mémery, J. Verron, J. Blum, and I. Charpentier. Can biogeochemical fluxes be recovered from nitrate and chlorophyll data? A case study assimilating data in the Northwestern Mediterranean Sea at the JGOFS-DYFAMED station. *J. Mar. Sys.*, 40-41:99–125, 2003.

Articles dans des actes de conférences

[12] J. Blum, C. Boulbe, and B. Faugeras. Real-time plasma equilibrium reconstruction in a tokamak. In *Journal of Physics: Conference Series. Proceedings of ICIPE 2008 Conference*, pages ???–???, Dourdan (Paris), France, June 2008.

[13] J. Blum, C. Boulbe, and B. Faugeras. Real-time equilibrium reconstruction in a tokamak. In *Burning Plasma Diagnostics. AIP Conference Proceedings*, volume 988, pages 420–429, Varenna, Italy, September 2007.

Communications dans des conférences, colloques et workshops

[14] J. Blum, C. Boulbe, and B. Faugeras. Identification en temps réel de l'équilibre du plasma dans un tokamak. In *Workshop ITER: aspects plasmas et matériaux*, Lab. J.-L. Lions, Paris, France, 22-24 mai 2008.

[15] J. Blum, C. Boulbe, and B. Faugeras. Identification en temps réel du profil de courant par le code equinox. In *Colloque inaugural de*

la Fédération de Recherche Fusion Magnétique, Ecole Polytechnique, Palaiseau, France, 29-30 avril 2008.

[16] O. Maury, O. Aumont, V. Kon, and B. Faugeras. Size-structured energy fluxes through the oceanic pelagic ecosystem: seasonal, interannual and decadal variability in the three oceans. In *1st CLIOTOP Symposium*, La Paz, Mexico, 3-7 December 2007.

[17] B. Faugeras and O. Maury. Modelling fish population movements: from an individual-based representation to an advection-diffusion equation. In *1st CLIOTOP Symposium*, La Paz, Mexico, 3-7 December 2007.

[18] O. Maury, B. Faugeras, A. Nielsen, M. Musyl, J. Gunn, J.Hampton, J.-C. Poggiale, and J. Sibert. Mechanistic modelling of bigeye tuna vertical movements in an ecosystem context: a state-space approach using the unscented kalman filter. In *1st CLIOTOP Symposium*, La Paz, Mexico, 3-7 December 2007.

[19] B. Faugeras. Modelling fish population movements: from an individual-based representation to an advection-diffusion equation. In *2ièmes journées INRA-IRD Mathématiques pour les Ressources Renouvelables*, Montpellier, France, 12-14 Mars 2007.

[20] B. Faugeras, O. Bernard, A. Sciandra, and M. Lévy. Assessing the benefit of detailed physiological photosynthesis modelling through comparison of three coupled hydrodynamical-biological models. In *European Geosciences Union, Geophysical Research Abstracts*, volume 6, Nice, France, 2004.

[21] B. Faugeras, M. Lévy, L. Mémery, J. Verron, J. Blum, and I. Charpentier. Estimating the parameters of a 1D biogeochemical model to assimilate data from the DYFAMED station in the Northwestern Mediterranean Sea. In *International Colloquium on Ocean Hydrodynamics*, Liège, Belgium, 2001.

[22] B. Faugeras, J. Blum, and J. Verron. Estimation de paramètres dans un modèle d'écosystème marin. In *CANUM*, Pompadour, France, 2001.

Rapports

[23] B. Faugeras. *Assimilation variationnelle de données dans un modèle couplé océan-biogéochimie*. Thèse de Doctorat, Université Joseph

Fourier Grenoble I, 2002.

[24] B. Faugeras. Diffuse interface formulations for region based active contour image segmentation. Rapport de recherche ISRN I3S/RR-2006-33-FR, CNRS, Laboratoire I3S, Sophia-Antipolis, France, Août 2006.