Nicolas P. Rougier's bibliography

Latest update on May 5, 2018.

Preprints

PP.1 N. P. Rougier and J. Timmer. "Ten Simple Rules for Scientific Fraud & Misconduct". In: *HAL* (2017).

PP.2 S. Shivkumar, V. S. Chakravarthy, and N. P. Rougier. "Modeling the Role of Striatum in Stochastic Multi Context Tasks". In: *BioRxiv* (Sept. 2017).

PP.3 M. Topalidou, D. Kase, T. Boraud, and N. P. Rougier. "Dual Competition between the Basal Ganglia and the Cortex: from Action-Outcome to Stimulus-Response". In: *BioRxiv* (2017).

Replications

RE.1 N. P. Rougier. "[Re] Weighted Voronoi Stippling". In: *ReScience* 3.1 (2017).

RE.2 M. Topalidou and N. P. Rougier. "[Re] Interaction between cognitive and motor cortico-basal ganglia loops during decision making: a computational study". In: *ReScience* 1.1 (2015).

Correspondences

CO.1 N. P. Rougier and K. Hinsen. "Code reviewing puts extra demands on referees". In: *Nature* 556.7701 (Apr. 2018), pp. 309–309.

CO.2 O. Guest and N. P. Rougier. "Diversity in reproducibility". In: *IEEE CDS Newsletter* 13.2 (2017).

CO.3 O. Guest and N. P. Rougier. "What is computational reproducibility?" In: *IEEE CDS Newsletter* 13.1 (2016).

CO.4 M. Topalidou, A. Leblois, T. Boraud, and N. P. Rougier. "A Long Journey into Reproducible Computational Neuroscience". In: *Frontiers in Computational Neuroscience* 9.28 (2015).

CO.5 N. P. Rougier and F. Alexandre. "Emergence of Representations Through Interactions of a Robot with the Real World". In: *ERCIM News* 53 (2003), pp. 22–23.

Highlights

HI.1 M. Hutson. "Artificial intelligence faces a replication crisis". In: *Science* 359.6377 (Feb. 2018).
Interview about the ReScience journal, see also [IJ.3].

HI.2 "How to draw perfect figures". In: *Nature* 513.7519 (Sept. 2014), pp. 463–463.
Social selection about Ten Simple Rules for Better Figures, see also [IJ.8].

HI.3 C. Woolston. "How to dodge the pitfalls of bad illustrations". In: *Nature* (Sept. 2014).
Highlight on Ten Simple Rules for Better Figures, see also [IJ.8].

Journals

IJ.1 F. C. Y. Benureau and N. P. Rougier. "Re-run, Repeat, Reproduce, Reuse, Replicate: Transforming Code into Scientific Contributions". In: *Frontiers in Neuroinformatics* 11 (Jan. 2018).

IJ.2 N. P. Rougier. "A Density-Driven Method for the Placement of Biological Cells Over Two-Dimensional Manifolds". In: *Frontiers in Neuroinformatics* 12 (Mar. 2018).

IJ.3 N. P. Rougier, K. Hinsen, F. Alexandre, T. Arildsen, L. Barba, F. C. Y. Benureau, C. T. Brown, P. de Buyl, O. Caglayan, A. P. Davison, M. A. Delsuc, G. Detorakis, A. K. Diem, D. Drix, P. Enel, B. Girard, O. Guest, M. G. Hall, R. N. Henriques, X. Hinaut, K. S. Jaron, M. Khamassi, A. Klein, T. Manninen, P. Marchesi, D. McGlinn, C. Metzner, O. L. Petchey, H. E. Plesser, T. Poisot, K. Ram, Y. Ram, E. Roesch, C. Rossant, V. Rostami, A. Shifman, J. Stachelek, M. Stimberg, F. Stollmeier, F. Vaggi, G. Viejo, J. Vitay, A. Vostinar, R. Yurchak, and T. Zito. "Sustainable computational science: the ReScience initiative". In: *PeerJ Computer Science* 3 (Dec. 2017), e142.

IJ.4 C. Piron, D. Kase, M. Topalidou, M. Goillandeau, N. P. Rougier, and T. Boraud. "The globus pallidus pars interna in goal-oriented and routine behaviors: Resolving a long-standing paradox". In: *Movement Disorders* (2016).

IJ.5 W. Taouali, L. Goffart, F. Alexandre, and N. P. Rougier. "A parsimonious computational model of visual target position encoding in the superior colliculus". In: *Biological Cybernetics* 109.4-5 (2015).

IJ.6 G. Detorakis and N. P. Rougier. "Structure of Receptive Fields in a Computational Model of Area 3b of Primary Sensory Cortex". In: *Frontiers in Computational Neuroscience* (2014).

IJ.7 N. P. Rougier. "Antialiased 2D Grid, Marker, and Arrow Shaders". In: *Journal of Computer Graphics Techniques (JCGT)* 3.4 (2014), pp. 1–52.

IJ.8 N. P. Rougier, M. Droettboom, and P. E. Bourne. "Ten Simple Rules for Better Figures". In: *PLoS Computational Biology* 10.9 (2014).

IJ.9 N. P. Rougier. "Higher Quality 2D Text Rendering". In: *Journal of Computer Graphics Techniques (JCGT)* 2.1 (2013), pp. 50–64.

IJ.10 N. P. Rougier. "Shader-based Antialiased Dashed Stroke Poylines". In: *Journal of Computer Graphics Techniques (JCGT)* 2.2 (2013), pp. 105–121.

IJ.11 G. I. Detorakis and N. P. Rougier. "A Neural Field Model of the Somatosensory Cortex: Formation, Maintenance and Reorganization of Ordered Topographic Maps". In: *PLoS ONE* 7.7 (2012), e40257.

IJ.12 N. P. Rougier and J. Fix. "DANA: Distributed numerical and adaptive modelling framework". In: *Network: Computation in Neural Systems* 23.4 (2012), pp. 237–253.

IJ.13 J. Fix, N. P. Rougier, and F. Alexandre. "A Dynamic Neural Field Approach to the Covert and Overt Deployment of Spatial Attention". In: *Cognitive Computation* 3.1 (2011), pp. 279–293.

IJ.14 N. P. Rougier and Y. Boniface. "Dynamic Self-Organising map". In: *Neurocomputing* 74.11 (2011), pp. 1840–1847.

IJ.15 N. P. Rougier and A. Hutt. "Synchronous and Asynchronous Evaluation of Dynamic Neural Fields". In: *Journal of Difference Equations and Applications* 17.8 (2011).

IJ.16 W. Taouali, T. Viéville, N. P. Rougier, and F. Alexandre. "No Clock to Rule Them All". In: *Journal Of Neurophysiology, Paris* 105.1–3 (2011).

IJ.17 A. Hutt and N. P. Rougier. "Activity spread and breathers induced by finite transmission speeds in two-dimensional neural fields". In: *Physical Review E* 82.5 (2010). Also in the virtual journal of biological research 20(10), 2010.

IJ.18 N. P. Rougier. "Implicit and Explicit Representations". In: *Neural Networks* 22.2 (2009), pp. 155–160.

IJ.19 J. Fix, N. P. Rougier, and F. Alexandre. "From physiological principles to computational models of the cortex". In: *Journal of Physiology, Paris* (2007), pp. 32–39.

IJ.20 N. P. Rougier. "Dynamic Neural Field with Local Inhibition". In: *Biological Cybernetics* 94.3 (2006), pp. 169–179.

IJ.21 N. P. Rougier and J. Vitay. "Emergence of Attention within a Neural Population". In: *Neural Networks* 19.5 (2006), pp. 573–581.

IJ.22 N. P. Rougier, D. C. Noelle, T. D. Braver, J. D. Cohen, and R. C. O'Reilly. "Prefrontal Cortex and Flexible Cognitive Control: Rules Without Symbols". In: *Proceedings of the National Academy of Science* 102.20 (2005), pp. 7338–7343.

IJ.23 N. P. Rougier and R. C. O'Reilly. "A Gated Prefrontal Cortex Model of Dynamic Task Switching". In: *Cognitive Science* 26.4 (2002), pp. 503–520.

Book & Thesis

BK.1 N. P. Rougier. *Python & OpenGL for Scientific Visualization*. Zenodo, 2018. To appear.

BK.2 N. P. Rougier. *From Python to Numpy*. Zenodo, 2016.

BK.3 G. Varoquaux, E. Gouillart, O. Vahtras, V. Haenel, N. P. Rougier, R. Gommers, F. Pedregosa, Z. Jedrzejewski-Szmek, P. Virtanen, C. Combelles, D. Pinte, R. Cimrman, A. Espaze, A. Chauve, and C. Burns. *Scipy Lecture Notes*. Zenodo, 2015.

BK.4 N. P. Rougier. "Fondements biologiques pour le calcul distribué, numérique et adaptatif". Habilitation. Université Nancy II, May 2011.

BK.5 N. P. Rougier. "Modèles de mémoires pour la navigation autonome". PhD thesis. Université Henri Poincaré - Nancy I, Oct. 2000.

Book Chapters

CH.1 F. Alexandre, P. F. Dominey, P. Gaussier, B. Girard, M. Khamassi, and N. P. Rougier. "When Artificial Intelligence and Computational Neuroscience meet". In: *A guided tour of artificial intelligence research, Vol. 3 Interfaces and applications of artificial intelligence*. To appear. Springer-Verlag, 2018.

CH.2 I. C. Kaadoud, N. Rougier, and F. Alexandre. "Implicit Knowledge Extraction and Structuration from Electrical Diagrams". In: *Advances in Artificial Intelligence: From Theory to Practice*. Springer International Publishing, 2017, pp. 235–241.

CH.3 A. Hutt and N. P. Rougier. "Numerical simulation scheme of one-and two-dimensional neural fields involving space-dependent delays". In: *Neural Field Theory*. Ed. by P. beim Graben, S. Coombes, R. Potthast, and J. Wright. Springer, 2014.

CH.4 N. P. Rougier and G. I. Detorakis. "Self-Organizing Dynamic Neural Fields". In: *Advances in Cognitive Neurodynamics (III)*. Ed. by Y. Yamaguchi. Springer, 2013.

CH.5 W. Taouali, N. P. Rougier, and F. Alexandre. "Visual Target Selection Emerges from a Bio-inspired Network Topology". In: *Computational Intelligence*. Ed. by K. Kurosh Madani, A. Correia, A. Rosa, and J. Filipe. Springer-Verlag, 2012.

CH.6 J. Fix, J. Vitay, and N. P. Rougier. "A Computational Model of Spatial Memory Anticipation during Visual Search". In: *Anticipatory Behavior in Adaptive Learning Systems: From Brains to Individual and Social Behavior*. Ed. by M. Butz, O. Sigaud, G. Pezzulo, and G. Baldassarre. Springer-Verlag Berlin Heidelberg, 2007.

CH.7 J. Vitay, N. P. Rougier, and F. Alexandre. "A distributed model of visual spatial attention". In: *Biomimetic Neural Learning for Intelligent Robotics*. Ed. by S. Wermter, G. Palm, and M. Elshaw. Springer-Verlag, 2005.

CH.8 H. Frezza-Buet, N. P. Rougier, and F. Alexandre. "A cerebral framework for the integration of biologically inspired temporal mechanisms for sequence processing". In: *Neural, symbolic and Reinforcement methods for sequence learning*. Ed. by L. Giles and R. Sun. Springer, 2000.

CH.9 N. P. Rougier. "Mémoires déclarative et procédurale pour la navigation autonome d'un animat". In: *Intelligence artificielle située. Cerveau, corps et environnement*. Ed. by A. Drogoul and J. Meyer. Hermès, 1999.

Conferences/Short Papers/Posters

CI.1 N. P. Rougier and B. Esfahbod. "Digital Typography & Rendering". In: *ACM SIGGRAPH*. Vancouver, Canada, Aug. 2018.

CI.2 A. Strock, N. P. Rougier, and X. Hinaut. "A Simple Reservoir Model of Working Memory with Real Values". In: *International Joint Conference on Neural Networks*. Rio, Brazil, July 2018.

CI.3 F. Benureau, T. Boraud, and N. P. Rougier. "Habits That Contradict Rewards". In: *7th Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics*. Lisbon, Portugal, Sept. 2017.

CI.4 B. T. Nallapu, B. R. Surampudi, and N. P. Rougier. "The art of scaling up : a computational account on action selection in the basal ganglia". In: *International Joint Conference in Neural Networks (IJCNN)*. May 2017.

CI.5 N. P. Rougier and Y. Boniface. "Motivated Self-Organization". In: *12th International Workshop on Self-Organizing Maps and Learning Vector Quantization,* Nancy, France, June 2017.

CI.6 B. T. Nallapu, N. P. Rougier, and B. R. Surampudi. "The art of scaling up : a computational account on action selection in basal ganglia". In: *3rd Annual Conference of the Association for Cognitive Science, India*. 2016.

CI.7 B. T. Nallapu and N. P. Rougier. "Dynamics of reward based decision making a computational study". In: *ICANN*. 2016.

CI.8 L. Campagnola, A. Klein, C. Rossant, and N. P. Rougier. "VisPy: Harnessing The GPU For Fast, High-Level Visualization". In: *Scipy, USA*. 2015.

CI.9 K. Hinsen and N. P. Rougier. "The ReScience initiative". In: *Euroscipy*. 2015.

CI.10 B. T. Nallapu, B. R. Surampudi, and N. P. Rougier. "Factors affecting reward based decision making : a computational study". In: *CBC, India*. 2015.

CI.11 N. P. Rougier. "Glumpy". In: *Euroscipy*. 2015.

CI.12 M. Topalidou, D. Kase, T. Boraud, and N. P. Rougier. "The Formation of habits". In: *CNS, Prague*. 2015.

CI.13 M. Topalidou, C. Piron, D. Kase, T. Boraud, and N. P. Rougier. "The Formation of habits". In: *SBDM, Paris*. 2015.

CI.14 M. Topalidou, C. Piron, D. Kase, T. Boraud, and N. P. Rougier. "The Formation of Habits: implicit supervision of the basal ganglia". In: *RLDM, Canada*. 2015.

CI.15 N. P. Rougier. "Modern Scientific Visualization". In: *X Developer's Conference*. 2014.

CI.16 L. Campagnola, A. Klein, C. Rossant, and N. P. Rougier. "Vispy – a future tool for interactive visualization". In: *BI Forum*. 2013.

CI.17 L. Campagnola, A. Klein, C. Rossant, and N. P. Rougier. "Vispy: A Modern and Interactive Visualization Framework". In: *Euroscipy*. 2013.

CI.18 G. I. Detorakis and N. P. Rougier. "Skin Topographic Maps in SI". In: *Progress in Neural Field Theory*. 2012.

CI.19 N. P. Rougier and G. I. Detorakis. "Self-Organizing Dynamic Neural Fields". In: *Third International Conference on Cognitive Neurodynamics*. 2011.

CI.20 N. P. Rougier and J. Fix. "Distributed, Numerical, Asynchronous and Adaptive computing framework". In: *Python in Neuroscience, EurosScipy satellite*. 2011.

CI.21 N. P. Rougier. "DANA". In: *EuroScipy*. 2010.

CI.22 N. P. Rougier. "From Computational Neurosience to Cellular Automata". In: *Automata*. 2010.

CI.23 W. Taouali, N. P. Rougier, and A. Frédéric. "Saccades generation : from the visual input to the superior colliculus". In: *International Conference on Neural Computation ICNC*. 2010.

CI.24 W. Taouali, A. Frédéric, A. Hutt, and N. P. Rougier. "Asynchronous Evaluation as an Efficient and Natural Way to Compute Neural Networks". In: *7th International Conference of Numerical Analysis and Applied Mathematics - ICNAAM*. 2009.

CI.25 J. Fix, N. Rougier, and F. Alexandre. "A top-down attentional system scanning multiple targets with saccades". In: *From Computational Cognitive Neuroscience to Computer Vision*. 2007.

CI.26 F. Alexandre, N. P. Rougier, and T. Viéville. "A regularization process to implement self-organizing neuronal networks". In: *International Conference on Engineering and Mathematics*. 2006.

CI.27 J. Fix, J. Vitay, and N. Rougier. "A Computational Model of Spatial Memory Anticipation during Visual Search". In: *Anticipatory Behavior in Adaptive Learning Systems*. 2006.

CI.28 J. Vitay and N. P. Rougier. "Using Neural Dynamics to Switch Attention". In: *International Joint Conference on Neural Networtks*. 2005.

CI.29 J. Vitay, N. P. Rougier, and F. Alexandre. "Reducing connectivity by using cortical modular bands". In: *European Symposium on Artificial Neural Networks*. 2004.

CI.30 N. P. Rougier. "Hippocampal Auto-Associative Memory". In: *International Joint Conference on Neural Networtks*. 2001.

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CI.32 N. P. Rougier and F. Alexandre. "A Model of Hippocampal-Cortical Interaction Using a Synaptic Triad Mechanism". In: *The Nature of Hippocampal-Cortical Interaction: Theoretical and Experimental Perspectives*. 2000.

CI.33 N. P. Rougier and F. Alexandre. "Spatial Knowledge Transfer Between Models of Hippocampus and Associative Cortex". In: *International Joint Conference on Neural Networtks*. 1999.

CI.34 N. P. Rougier, H. Frezza-Buet, and F. Alexandre. "Neuronal mechanisms for sequence learning in behavioral modeling". In: *Neural, Symbolic, and Reinforcement Methods for Sequence Learning Workshop, Sixteenth International Joint Conference on Artificial Intelligence*. 1999.

Science Outreach

SO.1 N. P. Rougier. "Silicon soul: The vain dream of electronic immortality". In: *The Conversation (US)* (2016).

SO.2 N. P. Rougier. "Why you'll never be able to upload your brain to the cloud". In: *The Conversation (US)* (2016).

SO.3 N. P. Rougier. "3615 EULA". In: *Binaires* (2015).

SO.4 N. P. Rougier. "Esprit in silico : les vains espoirs de l'immortalité". In: *The Conversation (FR)* (2015).

SO.5 N. P. Rougier. "Faut-il avoir peur de l'intelligence artificielle ?" In: *Thinkovery #3* (2015).

SO.6 N. P. Rougier. "L'intelligence artificielle n'aura pas lieu". In: *Scilogs* (2015).

SO.7 N. P. Rougier. "L'intelligence artificielle, mythes et réalités". In: *Interstices* (2015).

SO.8 N. P. Rougier. "Pourquoi l'idée de télécharger son cerveau n'a pas de sens". In: *The Conversation (FR)* (2015).

SO.9 N. P. Rougier. *Une brève histoire de l'intelligence artificielle*. Pint of Science, Bordeaux, France. 2015.

SO.10 N. P. Rougier. "Outils et bibliothèques de visualisation". In: *High Performance Computing* (Nov. 2013).

SO.11 N. P. Rougier. "Percer les mystères du cerveau". In: *Interstices* (2013).

SO.12 N. P. Rougier. "Petite histoire de la cybercriminalité". In: *Journée pédagogique pour l'ISN* (2013).

SO.13 A. Rousseau, A. Darnaud, B. Goglin, C. Acharian, C. Leininger, C. Godin, C. Holik, C. Kirchner, D. Rives, E. Darquie, E. Kerrien, F. Neyret, F. Masseglia, F. Dufour, G. Berry, G. Dowek, H. Robak, H. Xypas, I. Illina, I. Gnaedig, J. Jongwane, J. Ehrel, L. Viennot, L. Guion, L. Calderan, L. Kovacic, M. Collin, M.-A. Enard, M.-H. Comte, M. Quinson, M. Olivi, M. Giraud, M. Dorémus, M. Ogouchi, M. Droin, N. Lacaux, N. P. Rougier, N. Roussel, P. Guitton, P. Peterlongo, R.-M. Cornus, S. Vandermeersch, S. Maheo, S. Lefebvre, S. Boldo, T. Viéville, V. Poirel, A. Chabreuil, A. Fischer, C. Farge, C. Vadel, I. Astic, J.-P. Dumont, L. Féjoz, P. Rambert, P. Paradinas, S. De Quatrebarbes, and S. Laurent. *Médiation Scientifique : une facette de nos métiers de la recherche*. Tech. rep. 2013.

SO.14 N. P. Rougier. "Mémoire vive". In: *Universcité #4* (2011).

Invited Talks

IV.1 *Reproducibility in Machine Learning*. ICML Workshop on Reproducibility, Stockholm, Sweden. July 2018.

IV.2 *We ReDo Science*. Bernstein PhD Symposium, Berlin, Germany. Sept. 2018.

IV.3 *Decision Making: who's in charge?* Lex Robotica, CNAM, Paris, France. 2017.

IV.4 *Noise and Decision*. Symposium on the Biology of Decision Making, Bordeaux, France. 2017.

IV.5 *Reproducible Science.* University of Reading, United Kingdom. 2017.

IV.6 *ReScience, one year after.* Open science, transparence et évaluation, Bordeaux, France. 2017.

IV.7 *Scientific publishing on GitHub.* Computational Neuroscience Conference, workshop on Emerging models in scientific communication, Antwerps, Belgium. 2017.

IV.8 *Open Science.* AdaWeek, Paris, France. 2016.

IV.9 *ReScience.* Loi Numérique, et après ?, Meudon, France. 2016.

IV.10 *ReScience, refaire la science.* Retour d'expériences sur la recherche reproductible, Orléans, France. 2016.

IV.11 *Two actors, one critic.* Robotique & Neurosciences, Bordeaux, France. 2016.

IV.12 *Distributed, Asynchronous, Numerical & Adaptive computing: from neurons to behavior.* Colloque du GDR BioComp, Saint Paul de Vence, France. 2015.

IV.13 *From neuron to behavior.* Neuropsychology through the lenses of computational modelling, Birmingham, United Kingdom. 2015.

IV.14 *On ne voit que ce que l'on regarde.* Unithé ou Café, INRIA Bordeaux, France. 2015.

IV.15 *Cortical plasticity.* Computational Neuroscience Network, Marseille, France. 2014.

IV.16 *Cortical plasticity, a computational approach.* 3rd International Conference on Neural Field Theory, Reading, United Kingdom. 2014.

IV.17 *Cortical plasticity: a neural field approach.* Approaching Cognition from the Computational Neuroscience perspective workshop, Bernstein Conference, Göttingen, Germany. 2014.

IV.18 *Where is my mind?* Forum des Sciences Cognitives, Paris, France. 2014.

IV.19 *We see only what we look at.* Cerveau et Informatique, Université Paul Sabatier, Toulouse, France. 2013.

IV.20 *Where is my mind?* La Robotique et le Vivant, Cergy Pontoise, France. 2013.

IV.21 *Dynamic Neural Fields.* Brain & Signals, Institut Elie Cartan, Nancy, France. 2012.

IV.22 *Models of Visual Attention.* Intelligence Artificielle Embarquée, Cergy Pontoise, France. 2011.

IV.23 *Architecture Cérébrale et Robotique Autonome.* Robots, Hybrides et Corps, Nancy, France. 2009.

IV.24 *Visual Attention.* Computational Vision Workshop, Marseille, France. 2008.

IV.25 *Some questions around consciousness.* Conceptual Neuroscience, European Institute Para Limes, Wageningen, Nehterlands. 2007.

IV.26 *Visual Attention.* Models of Language Evolution, Acquisition and Processing, Leuven, Belgium. 2007.

IV.27 *Computational Neurocience for Humanoïd robotics.* Japanese-French Frontiers of Science, Kanagawa, Japan. 2006.

IV.28 *Rules without symbols.* Computational Models of Active Maintenance in Prefrontal Cortex, Alicante, Spain. 2003.

IV.29 *Mémoire Déclarative.* Xèmes Journées Neurosciences et Sciences de l'Ingénieur, Munster, France. 2000.

Invited Lectures

IL.1 *Less is more.* Python Scientifique, La Rochelle, France. 2017.

IL.2 *An Introduction to Matplotlib.* Scipy, Austin,Texas, USA. 2016.

IL.3 *Computational Neuroscience: from Single Neuron to Population.* Electromagnetic Fields and the Nervous System: Biological Effects, Biophysical Mechanisms, Methods, and Medical Applications, Erice, Italy. 2016.

IL.4 *Modern scientific visualization.* Advanced Scientific Programming in Python, Reading, United Kingdom. 2016.

IL.5 *Advanced Neural Fields.* Computational Neuroscience Symposium, Prague, Czech Republic. 2015.

IL.6 *An Introduction to Matplotlib.* Euroscipy, Cambridge, United Kingdom. 2015.

IL.7 *Reinforcement Learning.* Latin-America Summer School in Computational Neuroscience, Valparaiso, Chile. 2014.

IL.8 *Scientific visualization challenge*. Prospectom, Grenoble, France. 2014.

IL.9 *An introduction to Matplotlib*. Euroscipy, Cambridge, United Kingdom. 2013.

IL.10 *Scientific visualization*. PRACE Winter School, Dublin, Ireland. 2013.

IL.11 *Visualisation Scientifique*. Journées du dévelopement, Massy-Palaiseau, France. 2013.

IL.12 *Embodied Cognition*. National Institute of Informatics, Tokyo, Japan. 2010.

IL.13 *Introduction to Neural Fields*. National Institute of Informatics, Tokyo, Japan. 2010.

IL.14 *Models of Visual Attention*. National Institute of Informatics, Tokyo, Japan. 2010.

IL.15 *Visual Attention*. National Institute of Informatics, Tokyo, Japan. 2010.

Online Tutorials

TU.1 N. P. Rougier. *100 Numpy exercises*. 2015.
See https://github.com/rougier/numpy-100.

TU.2 N. P. Rougier. *Numpy Tutorial*. 2015.
See https://github.com/rougier/numpy-tutorial.

TU.3 N. P. Rougier. *Matplotlib Tutorial*. 2014.
See https://github.com/rougier/matplotlib-tutorial.