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JEAN-BAPTISTE POLINE

Nationality: French  
Languages: French, English

Helen Wills Neuroscience Institute  
UC Berkeley, CA, USA  
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#### EDUCATION :

2003: University Research Direction accreditation.  
1990-93: PhD in Biomathematics, University of Paris VII (December 1993).  
1989-90: Master in Biomathematics, Paris VII. Images analysis and Biostatistics.  
1983-88: Engineering degree in computer science and electronics (ESIEA, Paris).

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#### RESEARCH EXPERIENCE AND POSITION

2013-onwards: Research scientist, Helen Wills Neuroscience Institute, Brain Imaging Center, UC Berkeley  
2012-2013: Research visiting scholar at the Brain Imaging Center, UC Berkeley, USA, and visiting scholar at the Stanford Brain Imaging Center.  
2007-2011: Neurospin imaging center direction team and Imaging Genetic research program chair.  
2007-2010: Neurospin programs and projects coordinator.  
1997-2006 Service Hospitalier Frédéric Joliot, Direction des Sciences du Vivant, CEA:  
Group leader. Statistical data analyses and modeling applied to functional neuroimaging.  
October 95 – December 96 (Functional Imaging Laboratory, Queen Square, London, UK):  
Post doctoral fellow (K. Friston supervision). Statistical methods for functional brain imaging, SPM.  
July – August 95 (Mc Gill University, Dept. of Mathematics, Montréal, Canada): Research fellow (K. Worsley and A. Evans supervision). Development of a new test for functional imaging.  
February 94 – June 95 (Hammersmith Hospital, London, UK): Post doctoral fellow at the Medical Research Council, awarded a Marie-Curie Fellowship (K. Friston, R. Frackowiak supervision).  
October 90 – December 93 (C.E.A., S.H.F.J., Orsay):  
PhD thesis. Designing an activation detection method using a hierarchical description and multi-scale algorithm. Awarded a Seymour Cray price.  
February – August 89: Research assistant in artificial intelligence (University of Ottawa, Canada). Software development in Prolog.

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#### EDITORIAL BOARDS AND REVIEWS

Co-Editor in chief of frontiers in Brain Imaging Methods.  
Editorial board (past or present): Human Brain Mapping, Neuroimage, Neuroscience imaging, Brain Connectivity.  
Reviewing for NeuroImage, Human Brain Mapping, IEEE Transaction on Medical Imaging, Medical Image Analysis, Cerebral Cortex, Journal of Neuroscience, Neuron, PloS One, Medical Image Analysis (MedIA), Brain Research, Magnetic Resonance Imaging, Brain. PloS Biology, ISBI, MICCAI, NIPS.

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#### MEMBERSHIPS AND ORGANISING COMMITTEES

2010-onwards: Member of the Governing Board of the International Neuroinformatics Consortium Facility (INCF, Stockholm), and co-lead of the Neuroimaging datasharing task force.  
2009-2011: Secretary general of the Organisation for Human Brain Mapping ([www.ohbm.org](http://www.ohbm.org))  
2005-onwards: Organizing committee of 'Réseau des Sciences Cognitives'.  
2003-onwards: Human Brain Mapping conference: twice on the program committee, educational program chair, co-organizer of the advanced fMRI course (2007), co-organizer of the neuroimaging genetics course (2009-2012).  
2002-onwards: Piloting committee of "Institut Fédératif de Recherche IFR49 (Neuroimaging).

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#### GRANTS AND RESEARCH CONTRACTS

- 2012: Participant in the Sloan IPython grant for the development of neuroimaging statistics training material  
- 2012: Participant in the EU flagship "Human Brain Project", medical informatics pillar.  
- 2011: European "IMI – Autism", bioinformatics for autism research (D. Murphy), 250kE.

- 2011: Collaborator of the N4U for databasing (expansion of neuGRID services and outreach to new user communities, PI: G. Frisoni)
- 2011: Genomics and brain imaging “Brainomics”, (V. Frouin, JB Poline, E. Duchesnay) French National Research Agency (ANR), 850kE.
- 2010: Genetic and Neuroimaging (Genim) French National Research Agency (ANR), principal investigator, 110kE.
- 2010: French Alzheimer's disease image processing centre: PI of the database workpackage (~1ME).
- 2007: European project IMAGEN (G. Schumann). Principal investigator of the Bioinformatics and biostatistic sub-project: 1,12ME.
- 2006: IBM Watson and Neurospin project, functional connectivity and schizophrenia (C. Peck): 60kE.
- 2003-2005: “Action Concertée Incitative Neurosciences Intégratives et Computationnelles”. Simultaneous acquisition of IRMF-EEG (O. Faugeras) 120kE.
- Since 2001: Participation to several grants proposals, including “Action Masse de données” (O. Faugeras), “Action de recherche concertée” INRIA (N. Ayache, O. Faugeras et coll), “Programme ACI cognitive” (N. George / JB Poline), Program “cognition et traitement de l'information”, CNRS (L. Garnero / JB Poline).

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## MISCELLANEOUS

### Last four years invited talks:

Lawrence Berkeley National Laboratory, invited seminar: “Clustering techniques and use in Neuroimaging” (2014). Fukui (Japan), keynote lecture on “Functional MRI connectivity methods”, 2014. Seattle INCF Atlasing workshop, “Some constraints for the construction of a human brain atlas” (2013); Montreal Neurological Institute, Brain Imaging Center “Statistical and reproducibility issues in Imaging Genetics” (2013); Pacific Rim conference, “Statistical challenges in Imaging Genetics” (2013); Stanford, USA, “Neuroimaging genetics” (2012); MITACS, Vancouver (2012); Trento, Italy, ‘Bioinformatics challenges of imaging genetics’, (2011); Edinburg, UK, ‘Neuroimaging datasharing issues’, (2011); Lausanne, Switzerland, ‘Neuroimaging Databasing’, (2011), Paris, France, ‘Computational statistics, imaging genetics challenges’, (2010), Irving, USA, “Imaging genetics” (2010)

### Last workshops organized:

- Co-organizer of the OHBM Hackathon (Berlin 2014)
- International Neuroinformatics Coordinating Facility: co-organizing the Neuroimaging task force meetings (2011-onwards) and co-organizing the French Neuroinformatics workshop (Paris, 2014)
- Neuroimaging Data Sharing and Access (co organised with R. Poldrack, D. Kennedy, and INCF), Quebec, June 2011.
- INCF neuroimaging data sharing, 2010, Kobe, Japan.
- Imaging genetics day of the IFR49 ([www.ifr49.org](http://www.ifr49.org)); December 2010, Paris, France.
- INCF neuroimaging data sharing workshop, November 2010, San Diego, USA.
- Statistical data processing for the IMAGEN project, Mach 2009, Paris, France.

### Teaching:

- Co-teaching the Berkeley Practical Neuroimaging Analysis course (2013-onward)
- Stanford fMRI analysis in python course (2013-onward)
- Co-organizer of the Imaging genetics OHBM course (2011-onwards)
- (past) Responsible for the neuroimaging module at the Paris Cogmaster ([www.cogmaster.net](http://www.cogmaster.net))
- (past) Teaching fMRI analysis at ENSEA and at the medical imaging master (Paris XI)
- (past) Teaching at the London SPM course

Supervision of 7 Phd students and 3 post-doctoral fellows on neuroimaging data analysis during the past twelve years.

### Software development:

- Nipy (Python), Regions (Python), nidm (Python). In [www.github.com/jbpoline](http://www.github.com/jbpoline).
- SPM (Matlab)

### Book editor:

- Currently editing with G. Montana a Springer book entitled “Introduction to Imaging Genetics Methods” (eight chapters). The book will appear in print in January 2015.

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## PUBLICATIONS

2014

Da Mota, Benoit, Radu Tudoran, Alexandru Costan, Gael Varoquaux, Goetz Brasche, Patricia Conrod, Herve Lemaitre, et al. "Machine Learning Patterns for Neuroimaging-Genetic Studies in the Cloud." *Frontiers in Neuroinformatics* 8 (April 8, 2014). doi:10.3389/fninf.2014.00031.

Da Mota, Benoit, Virgile Fritsch, Gaël Varoquaux, Tobias Banaschewski, Gareth J. Barker, Arun L. W. Bokde, Uli Bromberg, et al. "Randomized Parcellation Based Inference." *NeuroImage* 89 (April 1, 2014): 203–15.

Desrivières, S, A Lourdasamy, C Tao, R Toro, T Jia, E Loth, LM Medina, et al. "Single Nucleotide Polymorphism in the Neuroplastin Locus Associates with Cortical Thickness and Intellectual Ability in Adolescents." *Molecular Psychiatry*, 2014.

**Poline, J-B**, and David Kennedy. "Software for Neuroimaging Data Analysis." In *Encyclopedia of Computational Neuroscience*. Springer, 2014.

Thompson, Paul M, Jason L Stein, Sarah E Medland, Derrek P Hibar, Alejandro Arias Vasquez, Miguel E Renteria, Roberto Toro, et al. "The ENIGMA Consortium: Large-Scale Collaborative Analyses of Neuroimaging and Genetic Data." *Brain Imaging and Behavior*, 2014, 1–30.

Mumford, Jeanette A., and **Poline, J-B**. "Contrasts and Inference." In *Brain Mapping: An Encyclopedic Reference*. Elsevier Inc., 2014.

*Under revision:*

Toro, R., **J.-B. Poline**, G. Huguet, E. Loth, V. Frouin, T. Banaschewski, G. J. Barker, et al. *Genomic Architecture of Human Neuroanatomical Diversity*, December 10, 2013. <http://biorxiv.org/lookup/doi/10.1101/001198>. Under revision in *Molecular Psychiatry*.

Jonas Richiardi, Andre Altmann, Anna-Claire Milazzo, Catie Chang, (...) Mike Hawrylycz, **J.-B. Poline**, Michael D. Greicius, and the IMAGEN consortium. Correlated Gene Expression Supports Correlated Activity in Brain Networks. Under revision in *Science*.

Fritsch, Virgile, Benoit Da Mota, Eva Loth, Gaël Varoquaux, Vincent Frouin, **J.-B. Poline**, and Bertrand Thirion. "Robust Regression for Large-Scale Neuroimaging Studies." under revision in *Neuroimage*.

Thirion, Bertrand, Gaël Varoquaux, Elvis Dohmatob, and **J.-B. Poline**. "Which fMRI Clustering Gives Good Brain Parcellations?" under revision in *Frontiers in Brain Imaging Methods*.

2013

Rish, I., Cecchi, G., Thyreau, B., Thirion, B., Plaze, M., Paillere-Martinot, M. L., Martelli, C., Matinot J.-L. **Poline J.-B.** (2013). Schizophrenia as a Network Disease: Disruption of Emergent Brain Function in Patients with Auditory Hallucinations. *PLoS one*, 8(1), e50625.

Schilling, C., Kühn, S., Romanowski, A., Banaschewski, T., Barbot, A., Barker, G. J., Brühl, R., et al. (2013). Common structural correlates of trait impulsiveness and perceptual reasoning in adolescence. *Human brain mapping*, 34(2), 374–383.

Toro, Roberto, **Poline J.B.**, Guillaume Huguet, Eva Loth, Vincent Frouin, Tobias Banaschewski, Gareth J Barker, et al. "Genomic Architecture of Human Neuroanatomical Diversity." *bioRxiv*, 2013.

Schilling, Christina, Simone Kühn, Alexander Romanowski, Tobias Banaschewski, Alexis Barbot, Gareth J Barker, Rüdiger Brühl, et al. "Common Structural Correlates of Trait Impulsiveness and Perceptual Reasoning in Adolescence." *Human Brain Mapping* 34, no. 2 (2013): 374–83.

**Poline J.B.**, and RA Poldrack. "Introduction to the Special Issue: Toward a New Era of Databasing and Data Sharing for Neuroimaging." *NeuroImage* 82, no. Complete (2013): 645–46.

Ng, Bernard, Gaël Varoquaux, **Poline J.B.**, and Bertrand Thirion. "A Novel Sparse Group Gaussian Graphical Model for Functional Connectivity Estimation." In *Information Processing in Medical Imaging*, 256–67. Springer Berlin Heidelberg, 2013.

Ng, Bernard, Gael Varoquaux, **Poline J.B.**, and Bertrand Thirion. "Implications of Inconsistencies between fMRI and dmRI on Multimodal Connectivity Estimation." In *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2013*, 652–59. Springer Berlin Heidelberg, 2013.

Michel, Vincent, Yannick Schwartz, Philippe Pinel, Olivier Cayrol, Antonio Moreno, **Poline J.B.**, Vincent Frouin, Dimitri Papadopoulos Orfanos, and others. "Brainomics: A Management System for Exploring and Merging Heterogeneous Brain Mapping Data." In *OHBM 2013 19th Annual Meeting of the Organization for Human Brain Mapping*, 2013.

Martinot, ML Paillère, H Lemaitre, E Artiges, R Miranda, R Goodman, J Penttilä, M Struve, et al. "White-Matter Microstructure and Gray-Matter Volumes in Adolescents with Subthreshold Bipolar Symptoms." *Molecular Psychiatry*, 2013.

Loth, Eva, **Poline J.B.**, Benjamin Thyreau, Tianye Jia, Chenyang Tao, Anbarasu Lourdasamy, David Stacey, et al. "Oxytocin Receptor Genotype Modulates Ventral Striatal Activity to Social Cues and Response to Stressful Life Events." *Biological Psychiatry*, 2013.

Le Floch, Edith, Laura Trinchera, Vincent Guillemot, Arthur Tenenhaus, **Poline J.B.**, Vincent Frouin, and Edouard Duchesnay. "Dimension Reduction and Regularization Combined with Partial Least Squares in High Dimensional Imaging Genetics Studies." In *New Perspectives in Partial Least Squares and Related Methods*, 147–58. Springer New York, 2013.

Guillemot, Vincent, Arthur Tenenhaus, Edouard Duchesnay, **Poline J.B.**, Vincent Frouin, and others. "A Multi-Block Approach in Imaging Genetics." *Proceedings of the 9th International Imaging Genetics Conference*, 2013.

Fritsch, Virgile, Benoit Da Mota, Gaël Varoquaux, Vincent Frouin, Eva Loth, **Poline J.B.**, and Bertrand Thirion. "Robust Group-Level Inference in Neuroimaging Genetic Studies." In *Pattern Recognition in Neuroimaging (PRNI), 2013 International Workshop on*, 21–24. IEEE, 2013.

Da Mota, Benoit, Virgile Fritsch, Gaël Varoquaux, Vincent Frouin, **Poline J.B.**, and Bertrand Thirion. "Enhancing the Reproducibility of Group Analysis with Randomized Brain Parcellations." In *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2013*, 591–98. Springer Berlin Heidelberg, 2013.

Da Mota, Benoit, Virgile Fritsch, Gaël Varoquaux, Tobias Banaschewski, Gareth J Barker, Arun LW Bokde, Uli Bromberg, et al. "Randomized Parcellation Based Inference." *NeuroImage*, 2013.

2012

Barra, J., Laou, L., **Poline, J.-B.**, Lebihan, D., & Berthoz, A. (2012). Does an Oblique/Slanted Perspective during Virtual Navigation Engage Both Egocentric and Allocentric Brain Strategies? *PloS one*, 7(11), e49537.

Breeze, J. L., **Poline, J.-B.**, & Kennedy, D. N. (2012). Data sharing and publishing in the field of neuroimaging. *GigaScience*, 1(1), 1.

Caclin, A., Paradis, A.-L., Lamirel, C., Thirion, B., Artiges, E., **Poline, J.-B.**, & Lorenceau, J. (2012). Perceptual alternations between unbound moving contours and bound shape motion engage a ventral/dorsal interplay. *Journal of Vision*, 12(7).

Da Mota, B., Eickenberg, M., Laguitton, S., Frouin, V., Varoquaux, G., **Poline, J.-B.**, Thirion, B., et al. (2012). A MapReduce Approach for Ridge Regression in Neuroimaging-Genetic Studies. *DCICTIA-MICCAI-Data-and Compute-Intensive Clinical and Translational Imaging Applications in conjunction with the 15th International Conference on Medical Image Computing and Computer Assisted Intervention-2012*.

Da Mota, B., Frouin, V., Duchesnay, E., Laguitton, S., Varoquaux, G., **Poline, J.-B.**, Thirion, B., et al. (2012). A fast computational framework for genome-wide association studies with neuroimaging data. *20th International Conference on Computational Statistics (COMPSTAT 2012)*.

Emeriau, S., Blanchard, F., **Poline, J.-B.**, Pierot, L., & Bittar, E. (2012). Unsupervised spatio-functional clustering of fMRI data based on new functional feature. *International Journal of Signal and Imaging Systems Engineering*, 5(2), 93–100.

Fritsch, V., Varoquaux, G., **Poline, J.-B.**, & Thirion, B. (2012). Non-parametric Density Modeling and Outlier-Detection in Medical Imaging Datasets. *Machine Learning in Medical Imaging* (pp. 210–217). Springer Berlin Heidelberg.

Fritsch, V., Varoquaux, G., Thyreau, B., **Poline, J.-B.**, & Thirion, B. (2012). Detecting outliers in high-dimensional neuroimaging datasets with robust covariance estimators. *Medical Image Analysis*.

Gollier-Briant, F., Artiges, E., Paillère-Martinot, M., Barbot, A., Goodman, R., Struve, M., Fadai, T., et al. (2012). Life events, anxiodepressive vulnerability and emotional processing during adolescence. *Neuropsychiatrie de l'Enfance et de l'Adolescence*, 60(5), S48.

Kühn, S., Romanowski, A., Schilling, C., Banaschewski, T., Barbot, A., Barker, G. J., Brühl, R., et al. (2012). Manual dexterity correlating with right lobule VI volume in right-handed 14-year-olds. *Neuroimage*, 59(2), 1615–1621.

Le Floch, E., Tenenhaus, A., Pinel, P., **Poline, J.-B.**, Trinchera, L., Frouin, V., Duchesnay, E., et al. (2012). Discovering Associations In High Dimensional Imaging-Genetics Data : A Comparison Study Of Dimension Reduction And Regularisation Strategies Combined With Partial Least Squares (pp. 1503–1506).

- Le Floch, Edith, Trinchera, L., Tenenhaus, A., **Poline, J.-B.**, Frouin, V., Duchesnay, É., & others. (2012). Dimension reduction and regularisation combined with Partial Least Squares in high dimensional imaging-genetics studies. *Proceedings of the 7th International Conference on Partial Least Squares and Related Methods*.
- Le Floch, E., Lalanne, C., Frouin, V., Pinel, P., Trinchera, L., Tenenhaus, A., Moreno, A., et al. (2012). Significant correlation between a set of genetic polymorphisms and a functional brain network revealed by feature selection and sparse Partial Least Squares. *NeuroImage*.
- Ng, B., Siless, V., Varoquaux, G., **Poline, J.-B.**, Thirion, B., & Abugharbieh, R. (2012). Connectivity-informed sparse classifiers for fMRI brain decoding. *Pattern Recognition in NeuroImaging (PRNI), 2012 International Workshop on* (pp. 101–104).
- Ng, B., Varoquaux, G., **Poline, J.-B.**, & Thirion, B. (2012). A novel sparse graphical approach for multimodal brain connectivity inference. *Medical Image Computing and Computer-Assisted Intervention--MICCAI 2012* (pp. 707–714). Springer Berlin Heidelberg.
- Poline, J.-B.**, Breeze, J. L., Ghosh, S., Gorgolewski, K., Halchenko, Y. O., Hanke, M., Haselgrove, C., et al. (2012). Data sharing in neuroimaging research. *Frontiers in neuroinformatics*, 6.
- Poline, J.-B.**, & Poldrack, R. A. (2012). Frontiers in brain imaging methods grand challenge. *Frontiers in Neuroscience*, 6.
- Poline, J.-B.**, & Brett, M. (2012). The General Linear Model and fMRI: does love last forever? *Neuroimage*, 62(2), In press
- Rohlfing, T., & **Poline, J.-B.** (2012). NeuroImage Why shared data should not be acknowledged on the author byline. *NeuroImage*, 59(4), 4189–4195.
- Schwartz, Y., Barbot, A., Thyreau, B., Frouin, V., Varoquaux, G., Siram, A., Marcus, D. S., **Poline, J.-B.** (2012). PyXNAT: XNAT in Python. *Frontiers in Neuroinformatics*, 6.
- Schwartz, Y., Varoquaux, G., Pallier, C., Pinel, P., **Poline, J.-B.**, & Thirion, B. (2012). Improving Accuracy and Power with Transfer Learning Using a Meta-analytic Database. *Medical Image Computing and Computer-Assisted Intervention--MICCAI 2012: 15th International Conference, Nice, France, October 1-5, 2012, Proceedings, Part III*, 248–255.
- Stacey, D., Bilbao, A., Maroteaux, M., Jia, T., Easton, A. C., Longueville, S., Nymberg, C., et al. (2012). RASGRF2 regulates alcohol-induced reinforcement by influencing mesolimbic dopamine neuron activity and dopamine release. *Proceedings of the National Academy of Sciences*, 109(51), 21128–21133.
- Stein, J. L., Medland, S. E., Vasquez, A. A., Hibar, D. P., Senstad, R. E., Winkler, A. M., Toro, R., et al. (2012). Identification of common variants associated with human hippocampal and intracranial volumes. *Nature genetics*, 44(5), 552–561.
- Tahmasebi, A. M., Artiges, E., Banaschewski, T., Barker, G. J., Bruehl, R., Büchel, C., Conrod, P. J., et al. (2012). Creating probabilistic maps of the face network in the adolescent brain: A multicentre functional MRI study. *Human brain mapping*, 33(4), 938–957.
- Thyreau, B., Schwartz, Y., Thirion, B., Frouin, V., Loth, E., Vollstädt-Klein, S., ..., **Poline, J.-B.** (2012). Very large fMRI study using the IMAGEN database: sensitivity - specificity and population effect modelling in relation to the underlying anatomy. *NeuroImage*, 61(1), 295–303.
- Tucholka, A., Fritsch, V., **Poline, J.-B.**, & Thirion, B. (2012). An empirical comparison of surface-based and volume-based group studies in neuroimaging. *Neuroimage*.
- Varoquaux, G., Gramfort, A., **Poline, J.-B.**, & Thirion, B. (2012). Markov models for fMRI correlation structure: is brain functional connectivity small world, or decomposable into networks? *Journal of Physiology-Paris*, 106(5), 212–221.
- Whelan, R. et al. (2012). Very large fMRI study using the IMAGEN database: sensitivity-specificity and population effect modelling in relation to the underlying anatomy.
- Whelan, R., Conrod, P. J., **Poline, J.-B.**, Lourdasamy, A., Banaschewski, T., Barker, G. J., Bellgrove, M. A., et al. (2012). Adolescent impulsivity phenotypes characterized by distinct brain networks. *Nature Neuroscience*, 920–925.

2011

- Fritsch, V., Varoquaux, G., Thyreau, B., **Poline, J.-B.**, & Thirion, B. (2011). Detecting outlying subjects in high-dimensional neuroimaging datasets with regularized minimum covariance determinant. *Medical Image Computing and Computer-Assisted Intervention--MICCAI 2011* (pp. 264–271). Springer Berlin Heidelberg.
- Nees, F., Tzschoppe, J., Patrick, C. J., Vollstädt-Klein, S., Steiner, S., Poustka, L., Banaschewski, T., et al. (2011). Determinants of early alcohol use in healthy adolescents: the differential contribution of neuroimaging and psychological factors. *Neuropsychopharmacology*, 37(4), 986–995.
- Ng, B., Abugharbieh, R., Varoquaux, G., **Poline, J.-B.**, & Thirion, B. (2011). Connectivity-informed fMRI activation detection. *Medical Image Computing and Computer-Assisted Intervention--MICCAI 2011* (pp. 285–292). Springer Berlin Heidelberg.

- Peters, J., Bromberg, U., Schneider, S., Brassens, S., Menz, M., Banaschewski, T., Conrod, P. J., et al. (2011). Lower ventral striatal activation during reward anticipation in adolescent smokers. *American Journal of Psychiatry*, 168(5), 540–549.
- Schneider, S., Peters, J., Bromberg, U., Brassens, S., Menz, M. M., Miedl, S. F., Loth, E., et al. (2011). Boys do it the right way: Sex-dependent amygdala lateralization during face processing in adolescents. *Neuroimage*, 56(3), 1847–1853.
- Schwartz, Y., Barbot, A., Vincent, F., Thyreau, B., Varoquaux, G., Thirion, B., & **Poline, J.-B.** (2011). PyXNAT: a Python interface for XNAT. *17th Annual Meeting of the Organization for Human Brain Mapping*.
- Fritsch, V., Varoquaux, G., Thyreau, B., **Poline, J.-B.**, & Thirion, B. (2011). Detecting outlying subjects in high-dimensional neuroimaging datasets with regularized minimum covariance determinant. *Medical Image Computing and Computer-Assisted Intervention--MICCAI 2011* (pp. 264–271). Springer Berlin Heidelberg.
- Nees, F., Tzschoppe, J., Patrick, C. J., Vollstädt-Klein, S., Steiner, S., Poustka, L., Banaschewski, T., et al. (2011). Determinants of early alcohol use in healthy adolescents: the differential contribution of neuroimaging and psychological factors. *Neuropsychopharmacology*, 37(4), 986–995.
- Ng, B., Abugharbieh, R., Varoquaux, G., **Poline, J.-B.**, & Thirion, B. (2011). Connectivity-informed fMRI activation detection. *Medical Image Computing and Computer-Assisted Intervention--MICCAI 2011* (pp. 285–292). Springer Berlin Heidelberg.
- Peters, J., Bromberg, U., Schneider, S., Brassens, S., Menz, M., Banaschewski, T., Conrod, P. J., et al. (2011). Lower ventral striatal activation during reward anticipation in adolescent smokers. *American Journal of Psychiatry*, 168(5), 540–549.
- Schneider, S., Peters, J., Bromberg, U., Brassens, S., Menz, M. M., Miedl, S. F., Loth, E., et al. (2011). Boys do it the right way: Sex-dependent amygdala lateralization during face processing in adolescents. *Neuroimage*, 56(3), 1847–1853.
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- Emeriau, S., Blanchard, F., **Poline, J.-B.**, Pierot, L., & Bittar, E. (2010). Connectivity feature extraction for spatio-functional clustering of fMRI data. *Image Processing Theory Tools and Applications (IPTA), 2010 2nd International Conference on* (pp. 38–43).
- Michel, V., Eger, E., Keribin, C., **Poline, J.-B.**, & Thirion, B. (2010). A supervised clustering approach for extracting predictive information from brain activation images. *Computer Vision and Pattern Recognition Workshops (CVPRW), 2010 IEEE Computer Society Conference on* (pp. 7–14).
- Poline, J.-B.**, Garnero, L., & Lahaye, P.-J. (2010). Combining Neuroimaging Techniques: The Future. *MEG: An Introduction to Methods: An Introduction to Methods*, 273–288.
- Poline, J.-B.**, Lalanne, C., Tenenhaus, A., Thirion, B., Frouin, V., & Duchesnay, E. (2010). Imaging genetics: bio-informatics and bio-statistics challenges. *Computational Statistics* (pp. 1–10). Springer.
- Poline, J.-B.**, Thirion, B., Roche, A., & Meriaux, S. (2010). 15 Intersubject Variability in fMRI Data: Causes, Consequences, and Related Analysis Strategies. *edited by Stephen José Hanson and Martin Buznl*, 173.
- Schumann, G., Loth, E., Banaschewski, T., Barbot, A., Barker, G., Büchel, C., Conrod, P. J., et al. (2010). The IMAGEN study: reinforcement-related behaviour in normal brain function and psychopathology. *Molecular psychiatry*, 15(12), 1128–1139.
- Thirion, B., Tucholka, A., & **Poline, J.-B.** (2010). Parcellation Schemes and Statistical Tests to Detect Active Regions on the Cortical Surface. *Proceedings of COMPSTAT'2010* (pp. 565–572). Physica-Verlag HD.
- Thirion, B., Varoquaux, G., & **Poline, J.-B.** (2010). Accurate definition of brain regions position through the functional landmark approach. *Medical Image Computing and Computer-Assisted Intervention--MICCAI 2010* (Vol. 13, pp. 241–248). Springer Berlin Heidelberg.
- Varoquaux, G., Gramfort, A., **Poline, J.-B.**, & Thirion, B. (2010). Brain covariance selection: better individual functional connectivity models using population prior. *arXiv preprint arXiv:1008.5071*.
- Varoquaux, G., Keller, M., **Poline, J.-B.**, Ciuciu, P., & Thirion, B. (2010). ICA-based sparse features recovery from fMRI datasets. *Biomedical Imaging: From Nano to Macro, 2010 IEEE International Symposium on* (pp. 1177–1180).
- Varoquaux, G., Sadaghiani, S., Pinel, P., Kleinschmidt, A., **Poline, J.-B.**, & Thirion, B. (2010). A group model for stable multi-subject ICA on fMRI datasets. *arXiv preprint arXiv:1006.2300*.

2009

- Cecchi, G. A., Rish, I., Thyreau, B., Thirion, F. B., Plaze, M., Paillere-Martinot, M.-L., ... **Poline, J.-B.** (2009). Discriminative network models of schizophrenia. *Advances in Neural Information Processing Systems*, 22, 252–260.

- Pernet, C R, Rousselet, G. A., Demonet, J. F., & **Poline, J.-B.** (2009). Voxel based classification reveals the right cerebellum as best biomarker in dyslexia. *Neuroimage*, 47, S69.
- Pernet, Cyril R, **Poline, J.-B.**, Demonet, J.-F., & Rousselet, G. A. (2009). Brain classification reveals the right cerebellum as the best biomarker of dyslexia. *BMC neuroscience*, 10(1), 67.
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