

VANRULLEN Rufin (ORCID: 0000-0002-3611-7716)Nationality: French, website: <https://rufinv.github.io>

- **CURRENT POSITION**

Directeur de Recherche, CNRS,
CerCo, Toulouse, France.

- **PAST POSITIONS**

2018 : Visiting Scientist, Simons
Institute for the Theory of
Computing - Berkeley, CA (USA)
2005-07: Visiting scholar,
Harvard Vision Sciences Lab -
Cambridge, MA (USA)
2000-02: Postdoc Scholar,
California Institute of Technology
- Pasadena, CA (USA)



- **EDUCATION**

2007 HDR, Université Paul Sabatier,
Toulouse, France
2000 PhD, Cognitive Science,
Université Paul Sabatier,
Toulouse, France
1996 Maîtrise, Computer Science,
Université Montpellier, France
1995 Licence, Mathematics,
Université Montpellier, France

- **INTERNATIONAL RECOGNITION (honors, prizes)**

- ERC Advanced Grant (2023-2028)
- ERC Consolidator Grant (2014-2019)
- European Young Investigator Award (EURYI, 2007)
- Médaille de Bronze du CNRS (2007)

- **SUPERVISION:** 21 PhD students (3 ongoing), 16 postdocs (1 ongoing), more than 40 Masters students.

- **SCIENTIFIC PRODUCTION:** <https://scholar.google.com/citations?user=1pwyaYgAAAAJ&hl=en>.

- **5 MOST RELEVANT PAPERS (last 10 years), Google Scholar Id: 1pwyaYgAAAAJ, h index: 59**

1. VanRullen, R., & Kanai, R. (2021). Deep learning and the Global Workspace Theory. *Trends in Neurosciences*. 44(9), 692-704
2. Choksi, B., Mozafari, M., Biggs O'May, C., Ador, B., Alamia, A., & VanRullen, R. (2021). Predify: Augmenting deep neural networks with brain-inspired predictive coding dynamics. *NeurIPS 2021: Advances in Neural Information Processing Systems*, 34.
3. Alamia, A., & VanRullen, R. (2019). Alpha oscillations and traveling waves: Signatures of predictive coding? *PLoS Biology*, 17(10).
4. VanRullen, R., Reddy, L. (2019). Reconstructing faces from fMRI patterns using deep generative neural networks *Communications Biology* 2(1), 193.
5. VanRullen, R. (2016). Perceptual cycles. *Trends in Cognitive Sciences* 20(10), 723-735.

- **EDITORIAL ACTIVITIES**

- Specialty Chief Editor, *Frontiers in Perception Science* (2016-)
- Associate Editor for *Journal of Neuroscience* (2018-), *Consciousness & Cognition* (2017-), *Psychological Science* (2012-2014) and *Frontiers in Perception Science* (2010-2015)

- **ACADEMIC RESPONSIBILITIES**

- Team Co-Director (2021-2023): "Neuro.AI" (4 independent PIs).
- Team Director (2015-2020): "Perceptual and Attentional Fluctuations" (4 independent PIs).
- Team Director (2010-2014): "Construction of Mental States and Representations" (4 independent PIs).
- Member of the CoNRS Interdisciplinary Committee CID 51 (2016-2021): "Modelling and analysis of Biological Data and Systems" (evaluation and recruitment of ~10 tenured faculty/year).
- Member of the Program Committee for international conferences: International Conference on Artificial Neural Networks (ICANN), Crete (Greece, 2023); TPNC, Taiwan (2020-21); IEEE CIMSIVP Symposium, Nashville (USA, 2009), Paris (France, 2011), Singapore (2013), Orlando (USA, 2014), Athens (Greece, 2016); Honolulu (USA, 2017); Bengaluru (India, 2018); Xiamen (China, 2019); European Conference on Visual Perception (ECVP), Toulouse (France, 2011); International Conference on Cognitive Neuroscience (ICON), Amsterdam (Netherlands, 2017).

- **COLLABORATIONS:** Ryota Kanai (Araya Inc, Japan), Patrick Cavanagh (York University, Canada), Radoslaw Cichy (Free University Berlin, Germany), Ole Jensen (Birmingham University, UK), Fred Hamker (Technische Universität Chemnitz, Germany), Anil Seth (Sussex University, UK), Frédéric Chavane (INT, Marseille, France), Suliann Ben Hamed (Lyon, France), Frank Bremmer (Marburg, Germany)

- **TEACHING ACTIVITIES (current or planned):** since 2020, teaching and management of "Intro to AI" class, accredited by ANITI (M2 level, 30h): <https://rufinv.github.io/Intro2AI-class/>

ASHER Nicholas (ORCID: 0000-0002-7689-8246)

Nationality: US, website: <https://www.irit.fr/~Nicholas.Asher/>

- **CURRENT POSITION**

Directeur de Recherche, CNRS,
EMERITE
IRIT, Toulouse, France.



- **PAST POSITIONS**

1982-2006: Professor,
Departments of Philosophy and
Linguistics, University of Texas at
Austin
1989-1990 Visiting Researcher,
Institut für Maschinelle
Sprachverarbeitung, University of
Stuttgart

- **EDUCATION**

1982 PhD Yale University
(Philosophy)
1978 BA Oxford University
(Mathematics and
Philosophy)
1976 BA-MA Yale University
(Philosophy, History, Arts
and Letters)

- **INTERNATIONAL RECOGNITION (honors, prizes)**

- Silver Medal, CNRS, 2019
- Prix des Sciences, Academie de l'Occitanie, 2019.
- ERC Advanced Grant (2011-2017)
- Lichtenberg Kolleg Fellow, Universität Göttingen
- American Mathematical Association, invited member, 2005
- New York Academy of Sciences, Invited member 1996

- **SCIENTIFIC PRODUCTION:** <https://scholar.google.com/citations?hl=en&user=yQ5Th-sAAAAJ>

- **5 MOST RELEVANT PAPERS (last 10 years), Google Scholar Id: yQ5Th-sAAAAJ h index: 57**

1. A. Chaturvedi, S. Bhar, S. Saha, U. Garain, N. Asher, 'Analyzing Semantic Faithfulness of Language Models via Input Intervention on Conversational Question Answering', accepted at *Computational Linguistics*, 2023.
2. N. Asher, S. Bhar, A. Chaturvedi, J. Hunter, S. Paul, 'Limits for Learning with language models', *Starsem Conference on Computational Semantics*, Toronto, 2023.
3. N. Asher, L. De Lara, S. Paul, C. Russell, 'Counterfactual Models for Fair and Adequate Explanations' *Machine Learning and Knowledge Extraction*, vol. 4, pp 316–349, 2022.
4. N. Asher, J. Hunter & K. Thompson, 'Modelling Structures for Situated Discourse,' *Dialogue & Discourse*, vol. 11 (1): 89-121, 2020, (doi: 10.5087/dad.2020.104).
5. S. Badene, C. Thompson, J.P. Lorr'e & N. Asher, 'Weak Supervision for Learning Discourse Structure', EMNLP 2019, Hong Kong.

- **MOST RELEVANT BOOKS**

1. N. Asher, *Lexical Meaning in Context: A Web of Words*, Cambridge University Press, 2011.
2. N. Asher & A. Lascarides, *Logics of Conversation*, Cambridge University Press, 2003.

- **ADMINISTRATIVE RESPONSABILITIES**

- Scientific Director, Artificial and Natural Intelligence Toulouse Institute (ANITI). ANITI is one of four national instituts interdisciplinaires en intelligence artificielle in France and became operational 26.04.2019.
- Invited Member, ERC review panel, 2015-2016, 2017-2018, 2019-2020.
- Invited Member, Review Committee for computer science panel ANR, 2014.
- Invited Member, Review Panel Committee for CONTINT Division of ANR, 2013.
- Appointed Member of the National Committee, Linguistics Division (section 34) CNRS, Paris, France, 2012-2016
- Elected Member of the National Committee, Linguistics Division (section 34) CNRS, Paris, France, 2010-2012
- President, Semantics Section, Congrès Mondiale de la Linguistique Française, La Nouvelle Orléans, 2010.
- Chair, Department of Philosophy, University of Texas at Austin, 2001- 2005

- **COLLABORATIONS:** University of Potsdam and DFKI, University of Edinburgh Informatics, University of Leuven (computer science), University of Bologna, Universität des Saarlandes, Universität Bielefeld, University of Colorado Boulder, University of Indiana, University of London

- **TEACHING ACTIVITIES (current or planned)** Lectures on discourse semantics and discourse parsing, lexical semantics, logic, explainability and interpretability, formal inductive epistemology and LLMs

STASSE Olivier (ORCID: 0000-0001-8569-6155)

Nationality: French, web site: <https://homepages.laas.fr/ostasse/>

- **CURRENT POSITION**

Directeur de Recherche, CNRS,
LAAS, Toulouse, France.



- **EDUCATION**

2013	HDR, Université Paul Sabatier, Toulouse, France
2000	PhD, Univ. Paris 6, France
1996	MsC (Operational Research): Univ. Paris 6, France

- **INTERNATIONAL RECOGNITION (honors, prizes)**

- The H2020 Memory of Motion European project coordinated by Nicolas Mansard and in which I participated received the Etoile de l'Europe award in Dec. 2022 and was selected as the Success Story during ERF 2023.
- Exceptional reviewer in 2012 for the IEEE Transactions on Robotics.
- Together with Bjorn Verrelst we won the best paper Award at ICMA 2006 for stepping over large obstacle with the humanoid robot HRP-2.
- The scientific project R-Blink I coordinated was nominated for the 2013 Digital Technological ANR Awards.
- Along with Francois Saidi I was finalist for best paper award ICAR 2007 for visual search with HRP-2.
- Together with Andrew Davison, Nicolas Mansard and other colleagues I was finalist for best video award ICRA 2007

- **SUPERVISION:** 17 PhD students (2 on-going), 4 post-Docs.

- **SCIENTIFIC PRODUCTION:** <https://scholar.google.com/citations?user=JSESzk4AAAAJ&hl=en>

- **5 MOST RELEVANT PAPERS (10 last years), Google Scholar Id: JSESzk4AAAAJ, h index: 35**

1. The Pinocchio C++ library: A fast and flexible implementation of rigid body dynamics algorithms and their analytical derivatives J. Carpentier, G. Saurel, G. Buondonno, J. Mirabel, F. Lamiroux, O. Stasse, N. Mansard 2019 IEEE/SICE International Symposium on System Integration (SII), 614-619, <https://hal.laas.fr/hal-01866228/document> h-index: 243
2. Whole-body model-predictive control applied to the HRP-2 humanoid, J. Koenemann, A. Del Prete, Y. Tassa, E. Todorov, O. Stasse, M. Bennewitz, N. Mansard, 2015 IEEE/RSJ International Conference on Intelligent Robots and Systems, <https://hal.science/hal-01137021/document> h-index: 233
3. A versatile and efficient pattern generator for generalized legged locomotion, J. Carpentier, S. Tonneau, M. Naveau, O. Stasse, N. Mansard, 2016 IEEE International Conference on Robotics and Automation (ICRA), 3555-3561 <https://hal.science/hal-01203507/document> h-index: 165
4. TALOS: A new humanoid research platform targeted for industrial applications, O. Stasse, T. Flayols, R. Budhiraja, K. Giraud-Esclasse, J. Carpentier, J. Mirabel, A. Del Prete, P. Souères, N. Mansard, F. Lamiroux, J-P Laumond, L. Marchionni, H. Tome, F. Ferro, 2017 IEEE-RAS 17th International Conference on Humanoid Robotics <https://hal.science/hal-01485519/file/ichr-talos.pdf> h-index: 143
5. Using a memory of motion to efficiently warm-start a nonlinear predictive controller, N. Mansard, A. Del Prete, M. Geisert, S. Tonneau, O. Stasse, 2018 IEEE International Conference on Robotics and Automation (ICRA), 2986-2993 <https://hal.science/hal-01591373/document> h-index: 71

- **EDITORIAL ACTIVITIES**

- Since 2019, Associate Editor of the IEEE Transactions on Robotics (<https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=8860>), 2015-2017 Associate Editor of the IEEE RA-L
- Since 2000, Member of the IEEE Technical Committee on Humanoids Robotics, Model-Based Optimization for Robotics

- **ACADEMIC RESPONSABILITIES:**

- PIA 3 – Project TIRREX: Head of the humanoid robot axis (1.3 M euros)
- Head of the Gepetto Group, LAAS, CNRS (8 PIs) since 2019
- Head of the Joint Lab ROB4FAM between Airbus Operations and LAAS, Gepetto.

- **COLLABORATIONS:** Technological University of Munich, Institute for Cognitive Systems, Pr. Gordon Cheng. PAL-Robotics Luca Marchionni, Francesco Ferro, Barcelona Spain. Pr. Maurice Fallon, Univ. of Oxford. Pr. Kensuke Harada , Univ. of Osaka, Japan, Pr. Eiichi Yoshida, Tokyo University of Science, Japan. Daniele Pucci, Italian Institute of Technology, Italy. Pr. Ludovic Righetti, New York University United States.

- **TEACHING ACTIVITIES (current or planned):** Introduction to ROS (INSA,ISAE, UPS) and companies (Total Energies, CNES, Airbus)

SERRE Thomas (ORCID: 0000-0003-0846-0039)Nationality: French, website: <https://serre-lab.clps.brown.edu>

- **CURRENT POSITION**

- Professor, Brown University - Providence, RI (USA)
- Faculty Director, Center for Computation and Visualization, Brown University.
- Associate Director, Center for Computational Brain Science, Carney Institute for Brain Science



- **PAST POSITIONS**

2006-10: Postdoctoral Scholar, McGovern Institute, MIT - Cambridge, MA (USA)

- **INTERNATIONAL RECOGNITION (honors, prizes)**

- Awarded Thomas J. Watson, Sr. Professor of Science endowed Chair (2023)
- PAMI Mark Everingham Prize for pioneering human action recognition datasets (2022)
- PAMI Helmholtz Prize for significant impact on computer vision research (2021)
- Awarded International Chair in AI at the Artificial and Natural Intelligence Toulouse Institute (France) (2019-2023)
- DARPA Director's Award (2016)
- Domain expert for IARPA's Machine Intelligence from Cortical Networks (MICrONS) program (2015 –2021)
- DARPA Young Faculty Award (2014)
- Professeur Invité, Lorient University (Lorient, France) (2014)
- NSF Early Career Award (2013)

- **SUPERVISION:** 18 PhD students (5 ongoing), 14 postdocs (3 ongoing).

- **SCIENTIFIC PRODUCTION:** <https://scholar.google.com/citations?user=kZIPW4wAAAAJ&hl=en>

- **5 MOST RELEVANT PAPERS (last 10 years), h index: 45, citations: 17K**

1. T. Serre. Deep learning: The good, the bad and the ugly. Annual Review of Vision Science, Vol. 5:399-426, 2019
2. P. Wilf, S. Zhang, S. Chikkerur, S.A. Little, S.L. Wing & T. Serre. Computer vision cracks the leaf code. Proceedings of the National Academy of Sciences, 113(12), 3305–3310, 2016
3. D.A. Mely, D. Linsley & T. Serre. Complementary surrounds explain diverse contextual phenomena across visual modalities. Psychological Review, 125(5), 769-784, 2018
4. D. Linsley, J. Kim, V. Veerabadrán, C. Windolf & T. Serre. Learning long-range spatial dependencies with horizontal gated-recurrent units. Proc. Neural Information Processing Systems, 2018
5. D. Reichert & T. Serre. Neuronal synchrony in complex-valued deep networks. In: Proc. International Conference on Learning Representations, 2014

- **EDITORIAL ACTIVITIES**

- Deputy Editor PLOS computational biology (2021–present)
- Associate Editor at eLIFE (2019–)
- Section Editor (Visual System) for the Encyclopedia of Computational Neuroscience (2017 – present)

- **ACADEMIC RESPONSIBILITIES**

- Area Chair for International Conferences including the International Conference on Machine Learning (ICML) 2021, 2022, 2023, International Conference on Learning Representations (ICLR) 2021, 2022, 2023, IEEE Computer Vision and Pattern Recognition conference (CVPR) 2014, 2018, 2019, 2020, 2021, 2022, 2023, Neural Information Processing Systems (NeurIPS) 2011, 2020, 2021, 2022, 2023, AAAI Conference on Artificial Intelligence 2020.

- **COLLABORATIONS:** Pieter Roelfsema (Netherlands Institute for Neuroscience, Amsterdam, Netherlands), Timo van Kerkoerle (NeuroSpin, Saclay, France), Nuria Oliver (ELLIS Alicante), Kohitij Kar (York University, Toronto, Canada)

- **TEACHING ACTIVITIES (current or planned):** Teaching primarily two courses at Brown University: CLPS 1590 Deep Learning in Brains, Minds & Machines (Spring) and CLPS 1291 Computational Methods for Mind, Brain & Behavior.

- **EDUCATION**

- 2006 PhD, MIT - Cambridge, MA (USA)
- 2000 Diplôme d'ingénieur, Telecom Bretagne, Brest (France)
- 2000 MSc, Signal processing, Université de Rennes (France)
- 1996-00: Classes préparatoires aux grandes écoles, Lycee Pasteur, Neuilly (France).