

# Sabine Kraml

Born on 19 July 1971 in Steyr, Austria. Nationality: Austria.

## Contact details

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## Professional career

**2018** Senior researcher 1st class (DR1) of the CNRS, LPSC Grenoble.  
**2012** Senior researcher 2nd class (DR2) of the CNRS, LPSC Grenoble.  
**2007** Junior researcher 1st class (CR1) of the CNRS, LPSC Grenoble.  
**2007** Habilitation, Leopold-Franzens University Innsbruck, Austria.  
**2003–2007** Postdoctoral researcher, Austrian Academy of Sciences, based at CERN.  
**2001–2003** Fellow in the CERN Theory Division.  
**1997–2001** Research fellow, Institute for High Energy Physics, Austria.  
**1994–1999** PhD in theoretical physics, Vienna University of Technology, Austria.

## Awards

**2016** Prime d'encadrement doctoral et de recherche, CNRS.  
**2011** Prime d'excellence scientifique, CNRS.  
**2008** Elected young member of the Austrian Academy of Sciences (now alumni status).  
**2005** APART<sup>1</sup> habilitation grant of the Austrian Academy of Sciences.

## Institutional responsibilities

**2012–2015** CNRS Comité National, Section 02 – theoretical physics.<sup>2</sup>  
**2011–2015** Head of the LPSC theory group.  
**2011–2014** Committee for preselection of CERN fellows, France.  
**2010–2013** Conseil scientifique & conseil d'unité, LPSC Grenoble, France.  
**2008–2012** Committee for financing theoretical physics in IN2P3 (CFT), France.

## Organization of workshops, conferences and schools

**since 2023** Co-convener, Methods and Tools Working Group, IRN Terascale (international network).  
**since 2016** Main organiser, Forum on the interpretation of the LHC results for BSM studies, CERN.  
**since 2016** Co-organiser, Vietnam School of Physics, Quy Nhon, Vietnam (bi-annually).  
**since 2007** Local organising committee, Physics at TeV Colliders, Les Houches, France (bi-annually).  
**2023** Program committee, Large Hadron Collider Physics (LHCP 2023) conference.  
**2021** Organizer, Publication of statistical models: hands-on workshop, CERN/online  
**2019** Co-convener, SUSY 2019, Corpus Christi, TX, USA.  
**2017** Co-organiser, LHC Chapter II: the Run for New Physics, Natal, Brasil.  
**2016–2021** Working group convener, LIA THEP (Indo-French High Energy Physics Collaboration).  
**2016** Organiser, Bethe Forum “Beyond the standard Higgs system”, Bonn, Germany.  
**2016** Scientific advisory committee, LHC-Ski: A first discussion of 13 TeV results, Obergurgl, Austria.  
**2015–2016** Co-convener, Task force on Higgs fiducial cross sections, LHC HXSWG, CERN.  
**2015** Co-convener, SUSY 2015, Lake Tahoe, CA, USA.  
**2012–2014** Organiser, Implications of the 125 GeV Higgs boson, Grenoble, France.  
**2012** Convener, Implications of LHC Results for TeV Scale Physics, CERN.

<sup>1</sup>Austrian Programme for Advanced Research and Technology

<sup>2</sup>The National Committee for Scientific Research, which is in charge of the recruitment and evaluation of researchers.

- 2009–2012** Co-convenor, Methods and Tools Working Group, GDR Terascale (national network), France.  
**2006–2012** Scientific adv. comm., Prospects for Charged Higgs Discovery at Colliders, Uppsala, Sweden.  
**2007–2011** Organizer, Workshop on the Interplay between Collider and Flavour Physics, CERN.  
**2007** Organizer, CERN Theory Institute on LHC–Cosmology Interplay, CERN.  
**2007** Local organising committee, Rencontres de Physique des Particules, Grenoble, France.  
**2004–2005** Organizer, Workshop on CP Studies and Non-standard Higgs Physics, CERN and SLAC.  
**2004** Scientific secretary, Physics at LHC, Vienna, Austria.  
**2002–2007** Co-founder and organiser of the CERH-TH Journal Club on Phenomenology, CERN.

## Commissions of trust

- Peer-review:** for CPC, EPJC, IJMPA, JHEP, PLB, PRD, PRL, and SciPost Phys.  
**Project evaluations:** for ANVUR/Italy, DFG/Germany, DOE/USA, FNRS/Belgium, FWF/Austria, NRDH/Hungary, NWO/The Netherlands, STFC/UK.  
**Juries:** referee and/or examiner for a variety of PhD and habilitation juries in France and worldwide.  
**2014** Member of AERES evaluation committee for the LUMP Montpellier.

## Editorial responsibilities

- 2024** Member of SciPost’s Editorial College in Physics.  
**2022** Chief editor, Data and Analysis Preservation, Recasting, and Reinterpretation, invited white paper, Snowmass 2021 Community Planing Exercise, arXiv:2203.10057.  
**2021** Chief editor, Publishing statistical models: Getting the most out of particle physics experiments, arXiv:2109.04981, SciPost Phys. 12, 037 (2022).  
**2019–2020** Chief editor, Reinterpretation of LHC Results for New Physics: Status and Recommendations after Run 2, arXiv:2003.07868, SciPost Phys. 9, 022 (2020).  
**2017–2018** Section editor, Searching for Long-Lived Particles at the LHC: White Paper of the LHC LLP Community, CERN, arXiv:1903.04497, J. Phys. G 47 (2020) 9, 090501.  
**2016** Section editor, Handbook of LHC Higgs Cross Sections: 4. Deciphering the Nature of the Higgs Sector, CERN-2017-002-M.  
**2012** Co-editor, Implications of LHC Results for TeV Scale Physics, CERN report submitted to the European Strategy Group.  
**2012** Topical editor, CLIC Conceptual Design Report, CERN-2012-003.  
**2006** Editor-in-chief, Workshop on CP Studies and Non-standard Higgs Physics, CERN-2006-009.  
**2004** Co-editor, ECFA/CERN studies of a European neutrino factory complex, CERN-2004-002.

## Outreach

- 2021** CERN Courier issue May/June 2021: *LHC reinterpreters think long-term* (invited article).  
**2020** Interview with science journalist Stephanie Melchor, article in Fermilab’s *Symmetry* magazine.  
**2016** Interview and portrait by cartoonist Lison Bernet for the *BD du LHC*, <https://goo.gl/zg5Nmr>.  
**2015–2016** Coached the project *Passionate About* of photographer Bree Corn, <http://passionate-about.com>.  
**2014–2015** Interview and portrait by photographer Patrick Dumas for the 60th anniversary of CERN; used in exhibition *Experts en la matière – Regards sur le Cern* in the Palais de la Découverte, Paris, and the web-documentary *Expérience Cern 360*, <http://experience-cern360.fr>.

## Projects, Grants

- 2024–2025** PI of international collaboration “Open meta-analysis in particle physics” (OpenMAPP); European Coordinated Research on Long-term Challenges in Information and Communication Sciences and Technologies ERA-NET.  
**2023–2024** PI of IN2P3 theory master project “DataMATTER” (machine learning in theoretical HEP).  
**2022–2026** Node coordinator, ANR PRC project “New Physics via Effective Field Theories at the LHC” (EFTatLHC), ANR-CE31-0022-02 (ANR AAPG2022), PI Nicolas Berger, LAPP.  
**2022–2025** PI of bilateral ANR-FWF project “Statistically Learning Dispersed New Physics” (SLDNP), ANR-21-CE31-0023 (ANR AAPG2021, PRCI).

- 2020–2022** PI of IN2P3 theory master project “BSMGA” (BSM Global Analyses).  
**2017–2019** PI of IN2P3 theory master project “LHC-itools” (Methods and tools for the interpretation of the LHC Run2 results for new physics).  
**2017–2018** PI of PRC275431 “Simplified Models Beyond Supersymmetry”, CNRS–FAPESP collaboration with A. Lessa in Santo Andre/Brasil.  
**2013–2017** Node coordinator, ANR blanc project “DMAstroLHC: Identification of dark matter—from astrophysics to the LHC” (PI G. Belanger, LAPTh).  
**2010–2013** PI of France–USA (PICS) and France–Germany (EGIDE PHC) collaboration projects.  
**2008–2010** Node coordinator, ANR blanc project “ToolsDmColl: Tools for dark matter and the new physics” (PI F. Boudjema, LAPTh).  
**2008–2015** A number of theory project grants from IN2P3, order 2-6 K€ per year.

## PhD students

- from 10/2024** Leo Constantin, topic: “Beyond the Standard Model at the LHC”, Univ. Grenoble–Alpes  
**since 2023** Théo Reymermier, topic: “Beyond the Standard Model at the Energy and the Intensity Frontiers”, Université Lyon, co-supervision with Nazila Mahmoudi.  
**since 2021** Timothée Pascal, topic: “Artificial Proto-Modelling for Dispersed Signals at the LHC”, Univ. Grenoble–Alpes (IRGA grant ANR-15-IDEX-02).  
**2019–2022** Gaël Alguero, PhD thesis “Beyond the Standard Model: phenomenology and LHC constraints of exotic dark matter”, Univ. Grenoble–Alpes, co-supervision with G. Bélanger; now data scientist for EUCLID.  
**2017–2020** Humberto Reyes Gonzalez, PhD thesis “Beyond vanilla new physics at the LHC”, Univ. Grenoble–Alpes; now postdoc at RWTH Aachen.  
**2014–2017** Ursula Laa, PhD thesis “Understanding LHC Searches for New Physics with Simplified Models”, Univ. Grenoble–Alpes, co-supervision with G. Bélanger; now tenured data scientist at Univ. Vienna.  
**2013–2016**, Jérémy Bernon, PhD thesis “Higgs sector characterization and aspects of the flavor puzzle”, Univ. Grenoble–Alpes, co-supervision with C. Smith; postdoc in Hong Kong, then left physics.  
**2011–2014** Beranger Dumont, PhD thesis “Higgs, supersymmetry and dark matter at the LHC” (Springer Thesis Award), Univ. J. Fourier Grenoble; now R&D/AI project leader in private industry.  
**2008–2011** Sylvain Fichet, PhD thesis “Aspects de théories unifiées supersymétriques en dimensions supplémentaires”, Univ. J. Fourier Grenoble; now lecturer at UFABC Santo André/Brasil.

## Postdocs

Rafal Maselek (2023–2025), Lohan Sartore (2023–2025), Mohammad Mahdi Altakach (2022–2025), Guillaume Chalons (2013–2016 & 2017–2018), Kentarou Mawatari (2015–2017), Dipan Sengupta (2014–2016), Suchita Kulkarni (2011–2014), Akin Wingerter (2010–2013), Karol Kovarik (2009–2010).

## Selected talks (plenaries, lectures)

- 2024**: preSUSY 2024, Madrid, Spain: *Supersymmetry at hadron colliders* (lectures).  
**2023**: SUSY 2023, Southampton, UK: *Constraining new physics with SModelS*.  
**2021**: Tools 2021, Lyon, France: *LHC recasting tools and approaches*.  
**2019**: Moriond 2019, La Thuile, Italy: *LHC constraints on extended SUSY*.  
**2017**: ALPS 2017, Obergurgl, Austria: *Re-interpreting BSM searches*.  
**2017**: HPNP 2017, Toyama, Japan: *The Alignment Limit in 2HDMs*.  
**2016**: Bethe Forum “Model Building in the 13 TeV Era”, Bonn, Germany: *Re-interpretation efforts*.  
**2014**: SUSY 2014, Manchester, UK: *Phenomenology of SUSY particles at high-energy colliders*.  
**2013**: Scalars 2013, Warsaw, Poland: *Global fit to Higgs signal strengths and couplings and implications for extended Higgs sectors*.  
**2013**: Planck 2013, Bonn, Germany, 20-24 May 2013: *SUSY after the Higgs*.  
**2012**: Moriond 2012, La Thuile, Italy: *SUSY status after one year of LHC*.  
**2011**: Bethe Forum Inauguration meeting, Bonn, Germany: *Implications of current LHC results for supersymmetry*.  
**2010**: SUSY 2010, Bonn, Germany: *Yukawa-unified SUSY*.

- 2010:** Les Rencontres de physique de la Vallée d’Aoste, La Thuile, Italy: *Status and Prospects of SUSY for the First Year of LHC*.
- 2009:** From the LHC to Future Colliders (LHC2FC), CERN: *CP Phases in SUSY*.
- 2008:** KITPC workshop, Beijing, China: *The Quest for Supersymmetry*.
- 2008:** Moriond 2008, La Thuile, Italy: *SUSY Dark Matter*.
- 2007:** SUSY 2007, Karlsruhe, Germany: *CP violation in supersymmetry*.
- 2007:** Four-Seas conference “Physique Sans Frontieres”, Iasi, Romania: *SUSY theories at LHC*.

## Publications

Citations summary, status 29/08/2024 (source: Inspire-Hep)

	Citeable papers	Published only
Total number of papers:	175	108
Total number of citations:	17,368	10,138
Average citations per paper:	99.2	93.9
h index	65	55

Full publication list: <http://inspirehep.net/author/profile/S.Kraml.1>