Publications of Prof. Dr. Samir Lounis

More than 120 publications in total (see 3 sections below). 110 published in peer reviewed journals (2 in Science, 2 in Science Advances, 2 in Nature Physics, 17 in Nature Communications, 8 in Physical Review Letters, 1 in Nanoletters, 2 in Communication Physics, 1 in Nature Physics Journal: Quantum Materials and 2 Nature Scientific Reports, 2 in PRB Letters), 5 review articles, two book contributions, one popular scientific article (see the different sections below). Hirsh Factor: 32 in Google Scholar.

I- Submitted manuscripts

[117] Emergence of zero-field non-synthetic single and catenated antiferromagnetic skyrmions in thin films,
A. Aldarawsheh, I. Lima Fernandes, S. Brinker, M. Sallermann, , M. Abusaa, S. Blügel, **S. Lounis**, submitted to Nat. Phys. (2022)

[116] Multi-body contributions to Gilbert damping for non-collinear magnets,
S. Brinker, M. dos Santos Dias, **S. Lounis**, submitted to J. Phys.: Cond. Mat. (2022)

[115] In-plane skyrmions and antiskyrmions: controlled creation and emergence in reconstructed Co monolayer on W(110),
F. dos Santos, M. dos Santos Dias, M. Hoffmann, S. Blügel, **S. Lounis**, submitted to Phys. Rev. B. Lett. (2022)

[114] Interplay of magnetic states and hyperfine fields of iron dimers on MgO(001),
S. Shehada, M. dos Santos Dias, M. Abusaa, **S. Lounis**, submitted to New J. Phys. (2022)

[113] Non-Majorana zero energy modes in diluted spin chains proximitized to a superconductor,
F. Küster, S. Brinker, R. Hess, D. Loss, S. S. P. Parkin, J. Klinovaja, **S. Lounis**, P. Sessi, submitted to Nature Physics (2021); ArXiv:2112.05708

[112] Complex magnetic structure and spin waves of the noncollinear antiferromagnet Mn5Si3,
N. Biniskos, F.J. dos Santos, K. Schmalzl, S. Raymond, M. dos Santos Dias, J. Persson, N. Marzari, S. Blügel, **S. Lounis**, T. Brückel, submitted to PRB (2021); ArXiv:2112.03368

[111] Spontaneous and externally driven quantum spin fluctuations of 3d and 4d single atoms adsorbed on graphene,
S. Sadki, F. S. M. Guimarães, J. Bouaziz, J. Ibañez-Azpiroz, L. B. Drissi, **S. Lounis**, submitted to PRB (2020), ArXiv:1912.09938

II- Published/accepted Publications (with hyperlinks)

[111] Spin-orbit enabled all-electrical readout of chiral spin-textures,
I. L. Fernandes, S. Blügel, **S. Lounis**, accepted in Nature Communications (2022)

[110] Reply to "Comment on "Proper and improper chiral magnetic interactions"",
M. dos Santos Dias, S. Brinker, A. Lászlóffy, B. Nyári, S. Blügel, L. Szunyogh, **S. Lounis**, Phys. Rev. B. Letters **105**, 026402 (2022)

[109] Polarisation-dependent single-pulse ultrafast optical switching of an elementary ferromagnet,
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[108] Scanning tunneling spectroscopy of subsurface Ag and Ge impurities in copper,
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[107] Anomalous excitations of atomically crafted quantum magnets,
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[106] Long range and highly tunable interaction between local spins coupled to a superconducting condensate,
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[105] Topological magnon insulators in two-dimensional van der Waals ferromagnets CrSiTe3 and CrGeTe3: Toward intrinsic gap-tunability,
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[102] Proper and improper chiral magnetic interactions,
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[101] Transverse transport in two-dimensional relativistic systems with nontrivial spin textures, J. Bouaziz, H. Ishida, **S. Lounis**, S. Blügel, Phys. Rev. Lett. **126**, 147203 (2021); arXiv:2103.06632
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