

# Liste de publications

Omar Mohsen\*

Last update October 13, 2024

- [1] I. Androulidakis, O. Mohsen, and R. Yuncken. “The convolution algebra of Schwartz kernels along a singular foliation”. In: *J. Operator Theory* 85.2 (2021), pp. 475–503. ISSN: 0379-4024,1841-7744. DOI: 10.7900/jot.
- [2] I. Androulidakis, O. Mohsen, and R. Yuncken. *A pseudodifferential calculus for maximally hypoelliptic operators and the Helffer-Nourrigat conjecture*. 2022. arXiv: 2201.12060 [math.AP].
- [3] O. Mohsen. “Chern-Simons invariants in  $KK$ -theory”. In: *J. Funct. Anal.* 277.11 (2019), pp. 108253, 17. ISSN: 0022-1236,1096-0783. DOI: 10.1016/j.jfa.2019.05.023.
- [4] O. Mohsen. “On the deformation groupoid of the inhomogeneous pseudo-differential calculus”. In: *Bull. Lond. Math. Soc.* 53.2 (2021), pp. 575–592. ISSN: 0024-6093. DOI: 10.1112/blms.12443.
- [5] O. Mohsen. *Blow-up groupoid of singular foliations*. 2022. arXiv: 2105.05201 [math.DG].
- [6] O. Mohsen. “Index theorem for inhomogeneous hypoelliptic differential operators”. In: *Muenster journal of mathematics* (2022). DOI: 10.48550/ARXIV.2001.00488.
- [7] O. Mohsen. *On the index of maximally hypoelliptic differential operators*. 2022. arXiv: 2201.13049 [math.KT].
- [8] O. Mohsen. “Witten deformation using Lie groupoids”. In: *Adv. Math.* 398 (2022), Paper No. 108142, 33. ISSN: 0001-8708,1090-2082. DOI: 10.1016/j.aim.2021.108142.
- [9] O. Mohsen. “A groupoid approach to the Wodzicki residue and the Kontsevich-Vishik trace”. In: *To appear in Journal of Noncommutative Geometry* (2024). arXiv: 2312.10415 [math.AP].
- [10] O. Mohsen. “Differential operators on  $C^*$ -algebras and applications to smooth functional calculus and Schwartz functions on the tangent groupoid”. In: *Journal of Functional Analysis* 287.11 (2024), p. 110615. ISSN: 0022-1236. DOI: <https://doi.org/10.1016/j.jfa.2024.110615>.
- [11] O. Mohsen. “Tangent groupoid and tangent cones in sub-Riemannian geometry”. In: *To appear in Duke Journal of mathematics* (2024). DOI: 10.48550/ARXIV.2212.01652.

---

\*Paris-Saclay University, Orsay, France  
E-mail: [omar.mohsen.fr@gmail.com](mailto:omar.mohsen.fr@gmail.com)