

## Jérémie Klinger

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Born 12/12/1996



## PhD

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**Laboratoire de Physique Théorique de la Matière Condensée**

**Paris, France**

*Random walks in confinement.*

2020–

PhD advisors : Raphaël Voituriez and Olivier Bénichou

Defense scheduled in 2023

**Keywords :** Stochastic processes, first passage time, visited territory, jump processes, preferential search and optimisation.

## Education

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**École Normale Supérieure / Institut Polytechnique de Paris**

**Paris, France**

*Master 2 ICFP, major Soft Matter and Biological Physics*

2019–2020

Highest Honors

**École Polytechnique**

**Palaiseau, France**

*Engineering Cycle, major Physics / Applied Mathematics*

2016–2019

Highest Honors

## Experiences

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**M2 internship at LPTMC, Sorbonne Université**

**Paris, France**

*Random Walks - Number of sites visited before exiting a domain, Ref. [\[P1\]](#)*

April–

Advisors : Raphaël Voituriez, Olivier Bénichou

August 2020

**M1 internship at Boston University**

**Boston, USA**

*Laser Induced Cavitation*

April–August 2019

Advisor : James Bird

## Conferences

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### Talks

◦ Journées de Physique Statistique, Paris (Mars 2022)

*Joint statistics of space and time exploration of 1-d Random Walks*

### Posters

◦ Venice Meeting on Fluctuations in Small Complex Systems V, Venise, Italie (Octobre 2021)

*Joint statistics of space and time exploration of 1-d Random Walks*

◦ Journée de l'Ecole Doctorale de Physique d'Île de France, Sorbonne Université (Juin 2022)

*Splitting Probabilities of 1-dimensionnal Jump Processes*

## Seminars

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- Theory Seminar of Laboratoire Jean Perrin, Paris (Mai 2022)  
*Splitting Probabilities of 1-dimensionnal Jump Processes*

### PhD students seminar

- LPTMC PhD seminar, Paris (Decembre 2020)  
*Classical Random Walks : Old but Gold*

## Publications

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- [P1] [J. Klinger](#), R. Voituriez, and O. Bénichou,  
Distribution of the span of one-dimensional confined random processes before hitting a target.  
*Phys. Rev. E* **103**, 032107 (2021).
- [P2] [J. Klinger](#), A. Barbier-Chebbah, R. Voituriez, and O. Bénichou,  
Joint statistics of space and time exploration of one-dimensional random walks.  
*Phys. Rev. E* **105**, 034116 (2021).
- [P3] [J. Klinger](#), R. Voituriez, and O. Bénichou,  
Splitting Probabilities of Jump Processes.  
Accepted in Physical Review Lett.  
[arXiv:2201.13179](#)