

Kurama OKUBO

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Tectonique et mécanique de la lithosphère, 1 Rue Jussieu, 75005 Paris, France*

*Currently working at
École Normale Supérieure
Laboratoire de Géologie, 24 rue Lhomond, 75005 Paris, France*

EDUCATION

2015/10-	Doctoral candidate*	<i>Sciences de la Terre et de l'Environnement et Physique de l'Univers Institut de Physique du Globe de Paris, France</i>
2015/03	M. E.	<i>Civil and Earth Resources Engineering Kyoto University, Japan</i>
2014/06	M. S.	<i>Earth Sciences, Environments and Planets Institut de Physique du Globe de Paris, France</i>
2013/03	B. E.	<i>Global Engineering Kyoto University, Japan</i>

**Advisors : Dr. Harsha S. Bhat & Dr. Yann Klinger*

RESEARCH INTEREST

Earthquake source physics.

Doctoral dissertation: Earthquake ruptures on complex fault systems and complex media.

GRANTS

2015.10 - 2018.09	Ph.D. Funding <i>Contrats doctoraux Université Sorbonne Paris Cité 2015 Volant International</i>
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AWARDS

- [1] 2018.04: **EGU Outstanding Student Poster and PICO (OSPP) Awards**: Okubo, K., Bhat, H. S., Lei, Z., Knight, E.E., Rougier, E. and Klinger, Y. *Overall energy budget of earthquake rupture with dynamically generated off-fault crack network*, EGU General Assembly Conference (Vienna, Austria)

REFEREED PUBLICATIONS, PAPERS IN REVIEW & IN PREPARATION

- [1] 2018: Klinger, Y., Okubo, K., Vallage, A., Champenois, J., Delorme, A., Rougier, E., Lei, Z., Knight, E. E., Munjiza, A., Baize, S., Langridge, R. & Bhat, H. S. (2018), *Earthquake damage patterns resolve complex rupture processes*, *Geophys. Res. Lett.*

PRESENTATIONS

► Oral presentations

- [1] 2017. 12: Okubo, K., Bhat, H. S., Rougier, E., Lei, Z., Earl, K. E. & Klinger, Y. *Dynamic fracture network around faults: implications for earthquake ruptures, ground motion and energy budget*, **AGU Fall Meeting** (New Orleans, USA).
- [2] 2017. 08: Okubo, K., Bhat, H. S., Klinger, Y. & Rougier, E. *Modeling dynamic earthquake rupture with coseismic off-fault damage*, **IAG-IASPEI Symposia** (Kobe, Japan).
- [3] 2017. 07: Okubo, K., Bhat, H. S., Klinger, Y. & Rougier, E. *Earthquake rupture modelling on complex fault systems and complex media*, **6th International Conference on Coupled THMC Processes in Geosystems** (Paris, France).

- [4] 2017. 04: Okubo, K., Bhat, H. S., Klinger, Y. & Rougier, E. *Modelling earthquake ruptures with dynamic off-fault damage*, **EGU General Assembly Conference** (Vienna, Austria).

► Poster presentations

- [5] 2018. 07: Okubo, K., Bhat, H. S., Rougier, E. & Klinger, Y. *The role of off-fault damage in rupture dynamics, radiation and overall energy budget*, **INTERNATIONAL SCHOOL OF PHYSICS “ENRICO FERMI” “Mechanics of Earthquake Faulting”** (Varenna, Italy).
- [6] 2018. 06: Okubo, K., Bhat, H. S., Rougier, E. & Klinger, Y. *Off-fault fracture network induced by dynamic earthquake rupture*, **50 Years of Plate Tectonics: Then, Now, and Beyond** (Collège de France, Grand Amphithéâtre, Paris, France).
- [7] 2018. 04: Okubo, K., Bhat, H. S., Klinger, Y. & Rougier, E. *Overall energy budget of earthquake rupture with dynamically generated off-fault crack network*, **EGU General Assembly Conference** (Vienna, Austria).
- [8] 2018. 04: Okubo, K., Bhat, H. S., Rougier, E., Vallage, A., Champenois, J. & Klinger, Y. *Distributed deformation field due to coseismic off-fault damage of Mw 7.8 Kaikoura earthquake*, **EGU General Assembly Conference** (Vienna, Austria).

► Seminars

- [1] 2017. 10: Okubo, K., Bhat, H. S., Rougier, E. & Klinger, Y. *Off-fault damage induced by dynamic earthquake rupture: Implications for rupture process, radiation and energy budget.*, **Los Alamos National Laboratory** (NM, USA).
- [2] 2017. 08: Okubo, K., Bhat, H. S., Rougier, E. & Klinger, Y. *Evolution of secondary crack network around faults induced by dynamic earthquake rupture*, **National Research Institute for Earth Science and Disaster Resilience** (Tsukuba, Japan).
- [3] 2017. 07: Okubo, K., Bhat, H. S., Rougier, E. & Klinger, Y. *Off-fault fracture network induced by dynamic earthquake ruptures*, **UMR Géoazur** (Nice, France).
- [4] 2016. 11: Okubo, K., Bhat, H. S., Rougier, E. & Klinger, Y. *Earthquake rupture modeling on complex fault systems and complex media*, **Los Alamos National Laboratory** (NM, USA).

COMPUTER SKILLS

Languages & Software: C/C++, Fortran90/95, Python, Matlab, HTML, php, SQL, Cubit (Trelis).

LANGUAGES

English (Fluently), French (Basic), Japanese (Native).