

# Stanford

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## Eline R Kupers

Postdoctoral Scholar, Psychology

### Bio

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#### BIO

Eline Kupers is a Postdoctoral Research Fellow working with Professor Kalanit Grill-Spector in the Psychology Department. Her research focuses on how visual information is processed in space and time in the human brain. She uses psychophysics, eye tracking, and neuroimaging techniques (MRI, EEG/MEG) in combination with computational modeling to answer her research questions.

Eline received her PhD from New York University, working with Professor Jonathan Winawer and Professor Marisa Carrasco. During her graduate studies, she worked on models of the human visual system that describe the first steps in seeing (from the retina to primary visual cortex). In her postdoctoral work, she continues to work on computational models of vision, but focuses on the neural mechanisms involved in high-level vision.

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, New York University (2020)
- Master of Philosophy, New York University (2020)
- Master of Arts, New York University (2018)
- Master of Science, Universiteit Van Amsterdam (2015)
- Bachelor of Science, Utrecht University (2012)

#### STANFORD ADVISORS

- Kalanit Grill-Spector, Postdoctoral Research Mentor
- Kalanit Grill-Spector, Postdoctoral Faculty Sponsor

#### LINKS

- Personal website: <http://elinekupers.github.io/>
- Google Scholar: <https://scholar.google.com/citations?user=zti4h7AAAAAJ>

### Publications

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#### PUBLICATIONS

- **Asymmetries around the visual field: From retina to cortex to behavior.** *PLoS computational biology*  
Kupers, E. R., Benson, N. C., Carrasco, M., Winawer, J.  
1800; 18 (1): e1009771
- **A Population Receptive Field Model of the Magnetoencephalography Response.** *NeuroImage*  
Kupers, E. R., Edadan, A., Benson, N. C., Zuiderbaan, W., de Jong, M. C., Dumoulin, S. O., Winawer, J.

2021: 118554

- **Cortical Magnification in Human Visual Cortex Parallels Task Performance around the Visual Field.** *eLife*  
Benson, N. C., Kupers, E. R., Babot, A., Carrasco, M., Winawer, J.  
2021; 10
- **A visual encoding model links magnetoencephalography signals to neural synchrony in human cortex.** *NeuroImage*  
Kupers, E. R., Benson, N. C., Winawer, J.  
2021: 118655
- **Modeling visual performance differences 'around' the visual field: A computational observer approach** *PLOS COMPUTATIONAL BIOLOGY*  
Kupers, E. R., Carrasco, M., Winawer, J.  
2019; 15 (5): e1007063
- **A non-invasive, quantitative study of broadband spectral responses in human visual cortex** *PLOS ONE*  
Kupers, E. R., Wang, H. X., Amano, K., Kay, K. N., Heeger, D. J., Winawer, J.  
2018; 13 (3): e0193107