

Attila Geresdi

*Qubit implementation in  
nanowire networks*

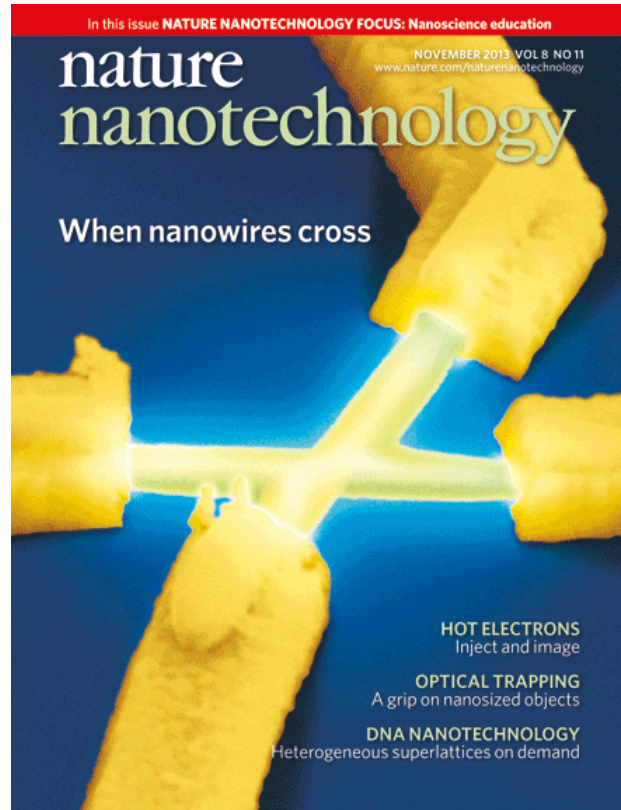
# Braiding in nanowires



# Braiding in nanowires



# Nanowire networks for braiding



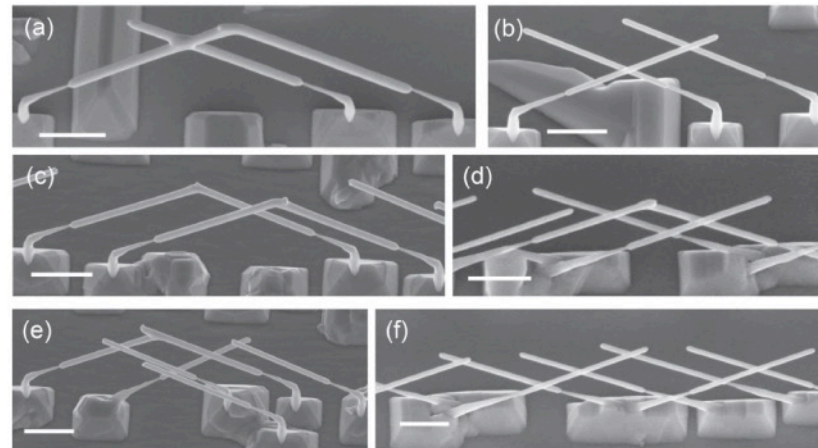
Plissard, van Weperen et al,  
Nature Nanotechnology  
**8**, 859 (2013).

Materials  
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www.MaterialsViews.com

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MATERIALS  
www.advmat.de

## Rationally Designed Single-Crystalline Nanowire Networks

Diana Car,\* Jia Wang, Marcel A. Verheijen, Erik P. A. M. Bakkers,  
and Sébastien R. Plissard



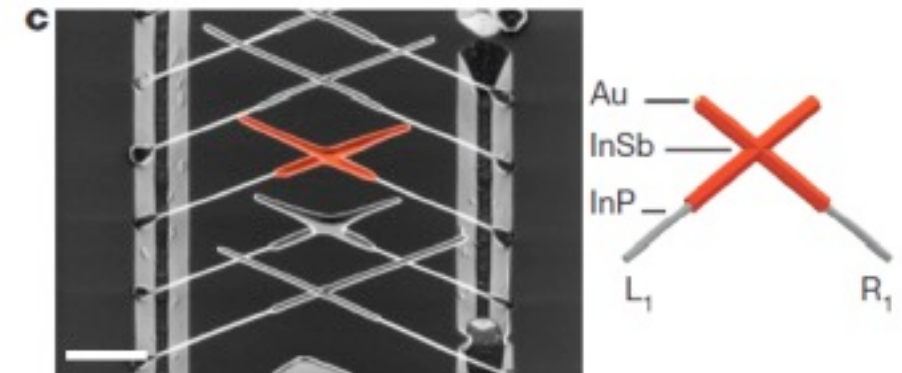
Car et al,  
Advanced Materials  
**26**, 4875 (2014).

## LETTER

doi:10.1038/nature23468

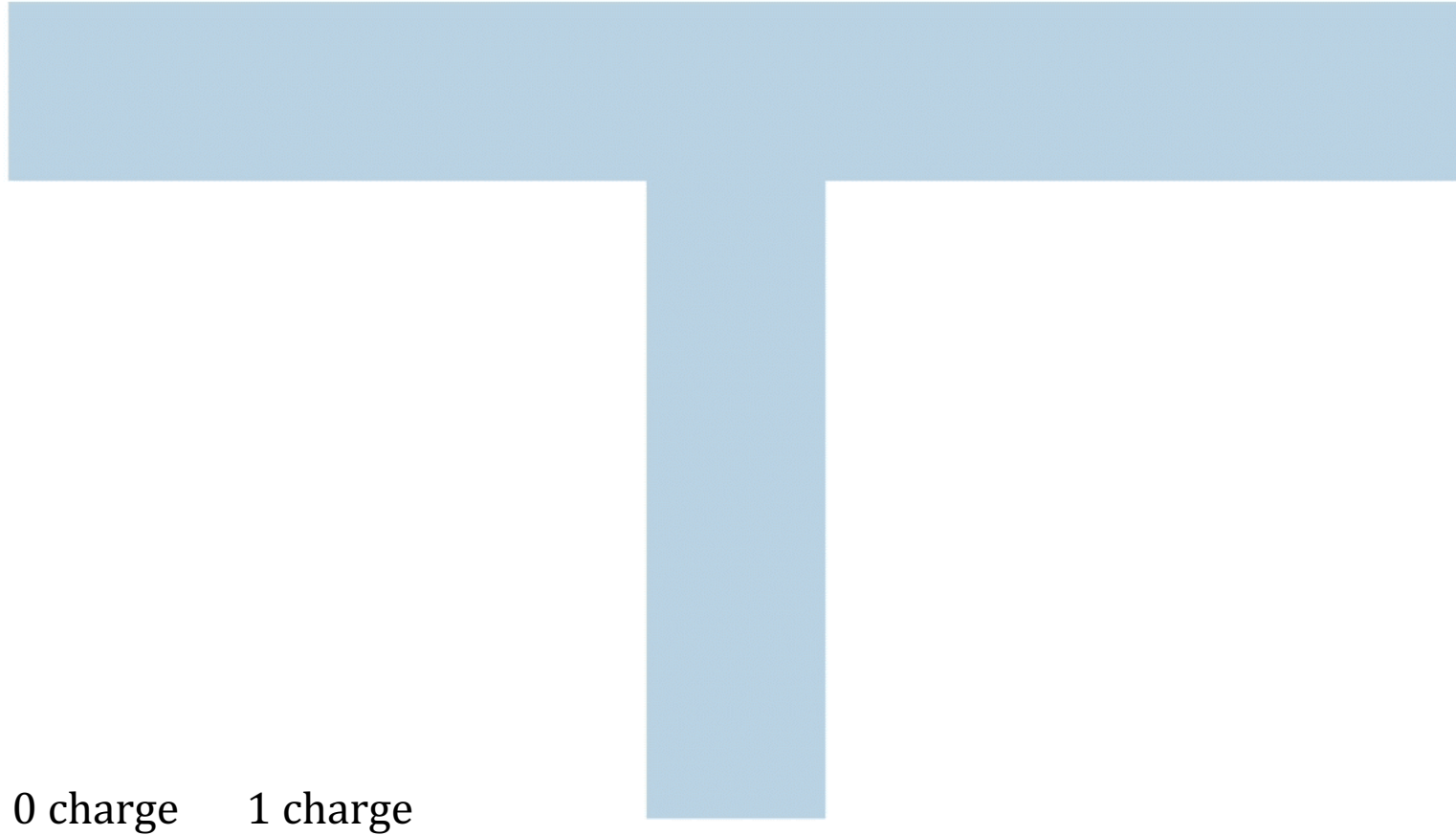
## Epitaxy of advanced nanowire quantum devices

Sasa Gazibegovic<sup>1,2\*</sup>, Diana Car<sup>1,2\*</sup>, Hao Zhang<sup>1\*</sup>, Stijn C. Balk<sup>1</sup>, John A. Logan<sup>3</sup>, Michiel W. A. de Moor<sup>1</sup>, Maja C. Cassidy<sup>1</sup>, Rudi Schmits<sup>4</sup>, Di Xu<sup>1</sup>, Guanzhong Wang<sup>4</sup>, Peter Krogstrup<sup>5</sup>, Roy L. M. Op het Veld<sup>1,2</sup>, Kun Zuo<sup>1</sup>, Yoram Vos<sup>1</sup>, Jie Shen<sup>1</sup>, Daniël Bouman<sup>1</sup>, Borzoyeh Shojaei<sup>3</sup>, Daniel Pennachio<sup>3</sup>, Joon Sue Lee<sup>6</sup>, Petrus J. van Veldhoven<sup>2</sup>, Sebastian Koelling<sup>2</sup>, Marcel A. Verheijen<sup>2,7</sup>, Leo P. Kouwenhoven<sup>1,8</sup>, Chris J. Palmström<sup>3,6,9</sup> & Erik P. A. M. Bakkers<sup>1,2</sup>

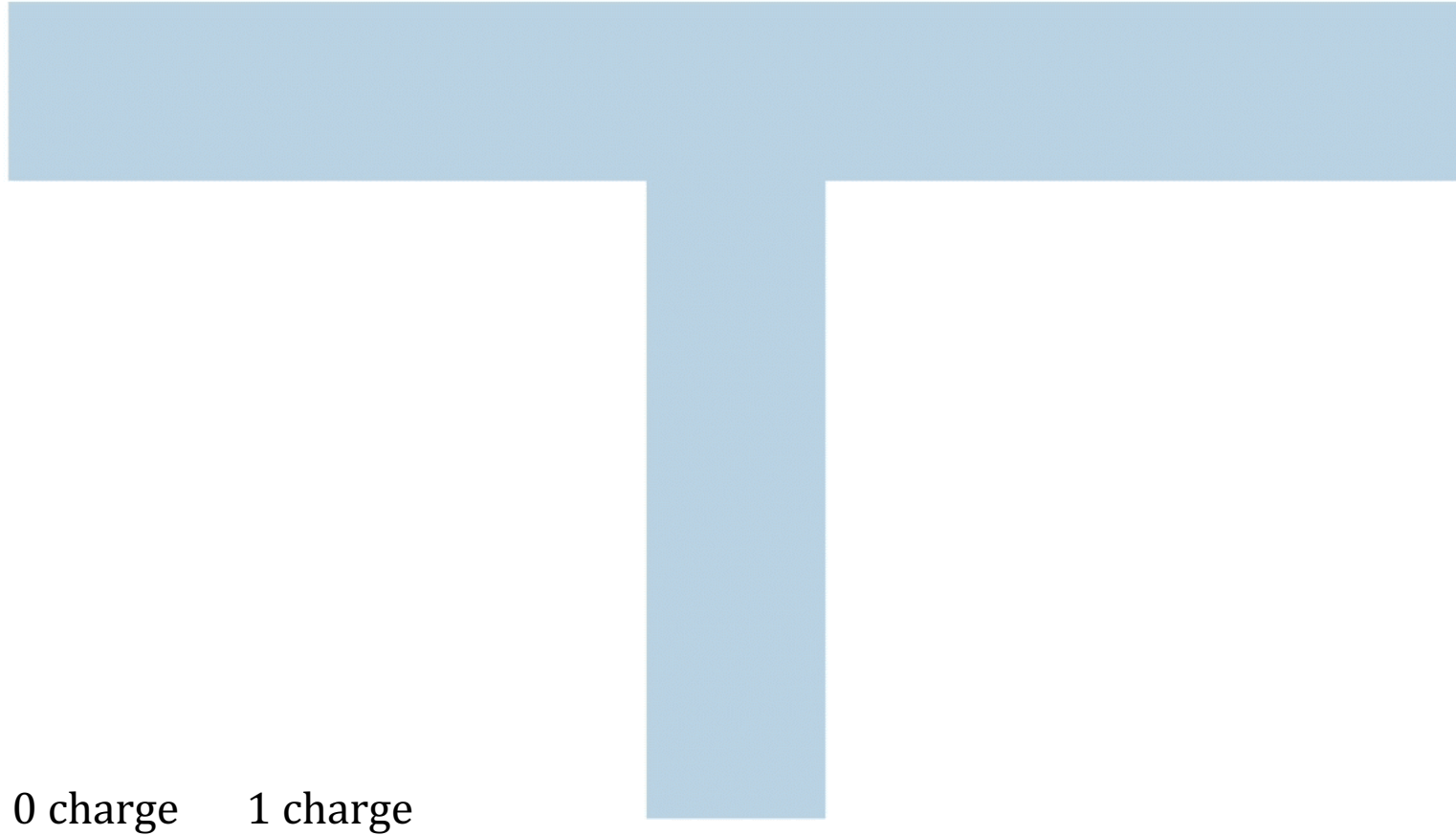


Gazibegovic et al,  
Nature **548**, 434 (2017).

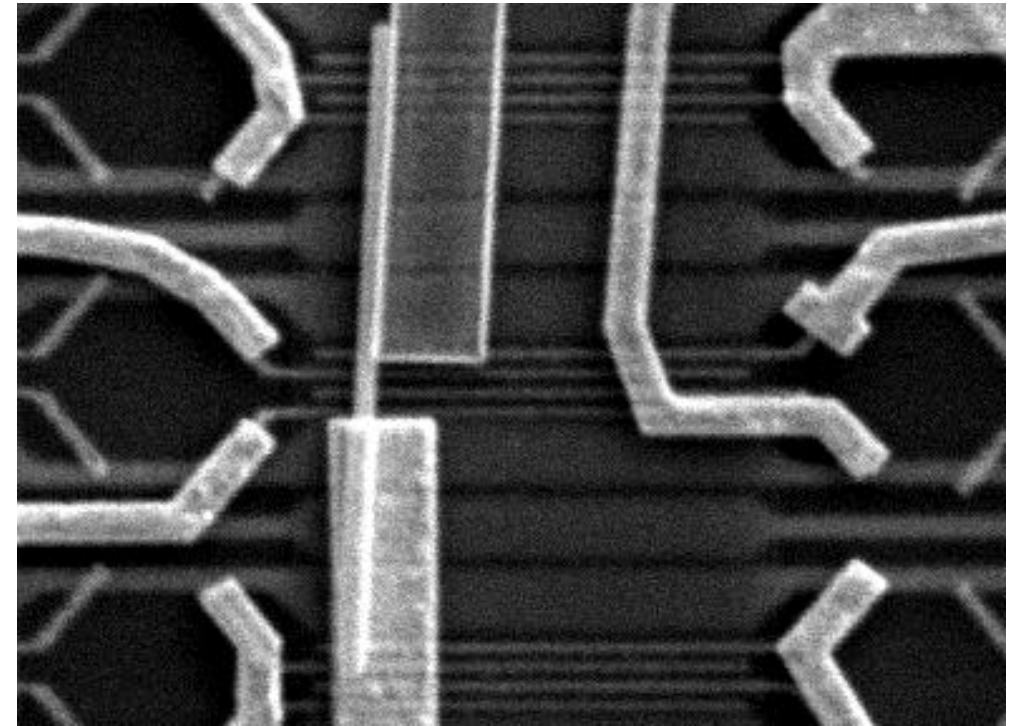
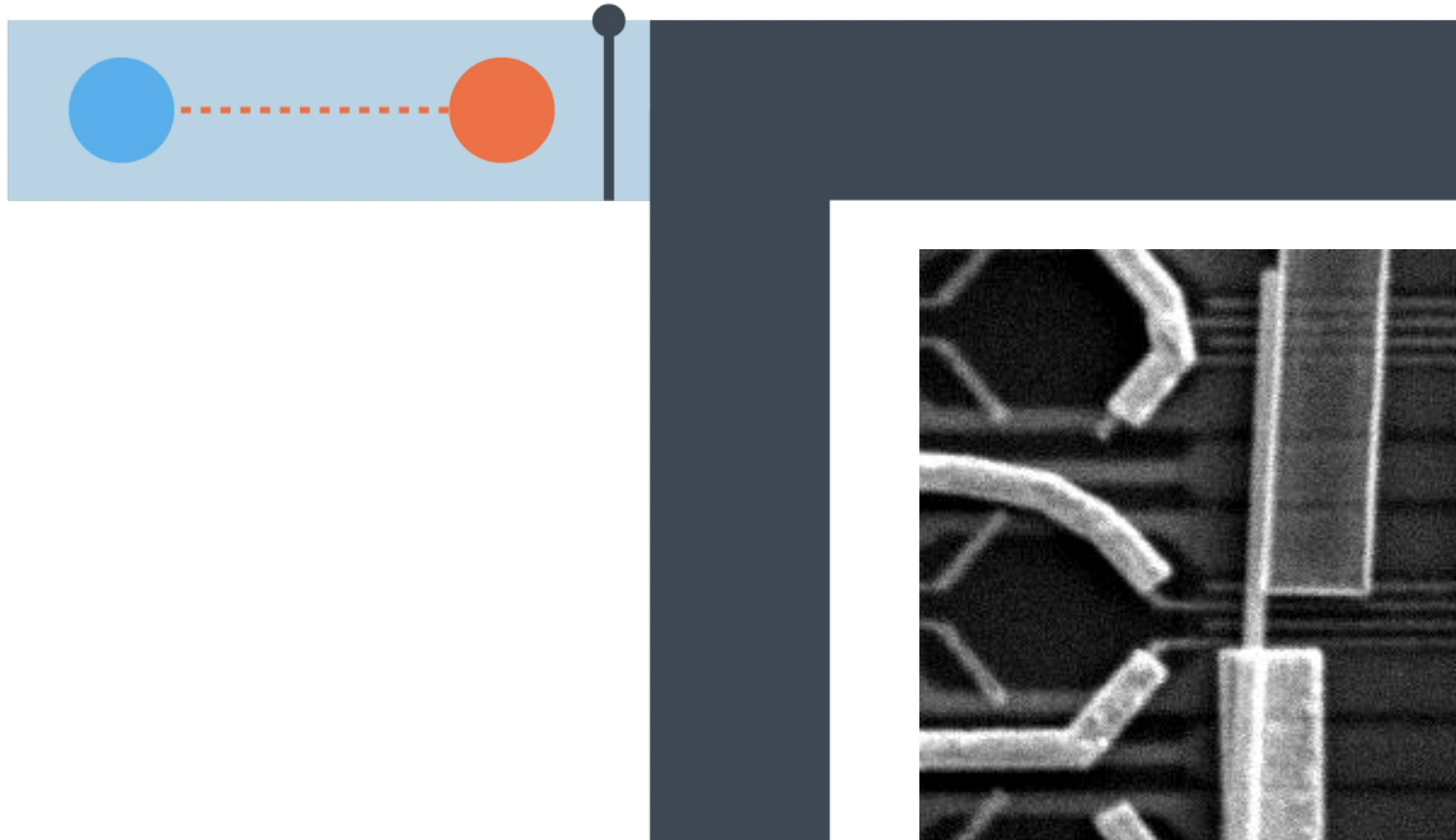
# Quantum state measurement



# Quantum state measurement

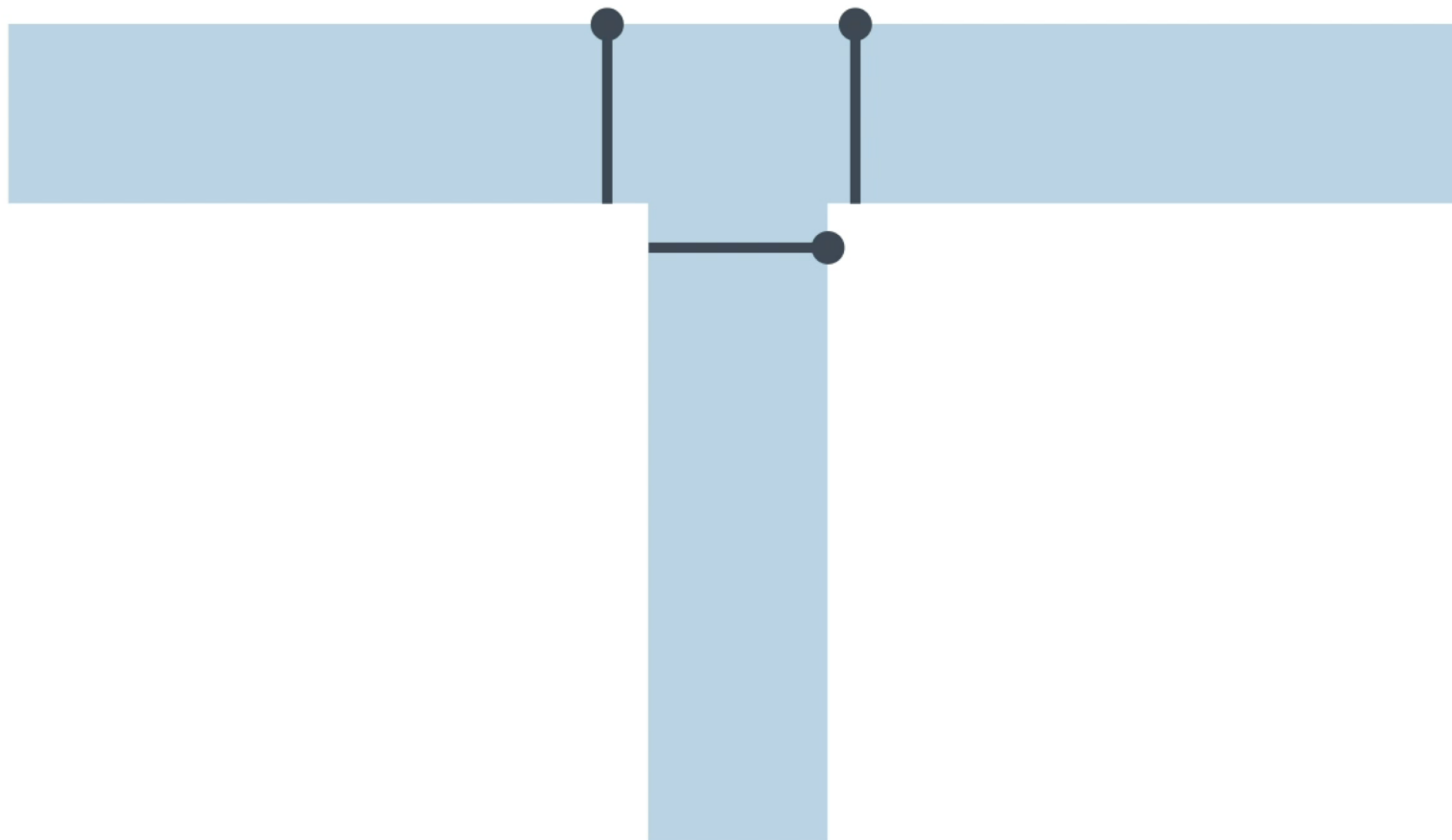




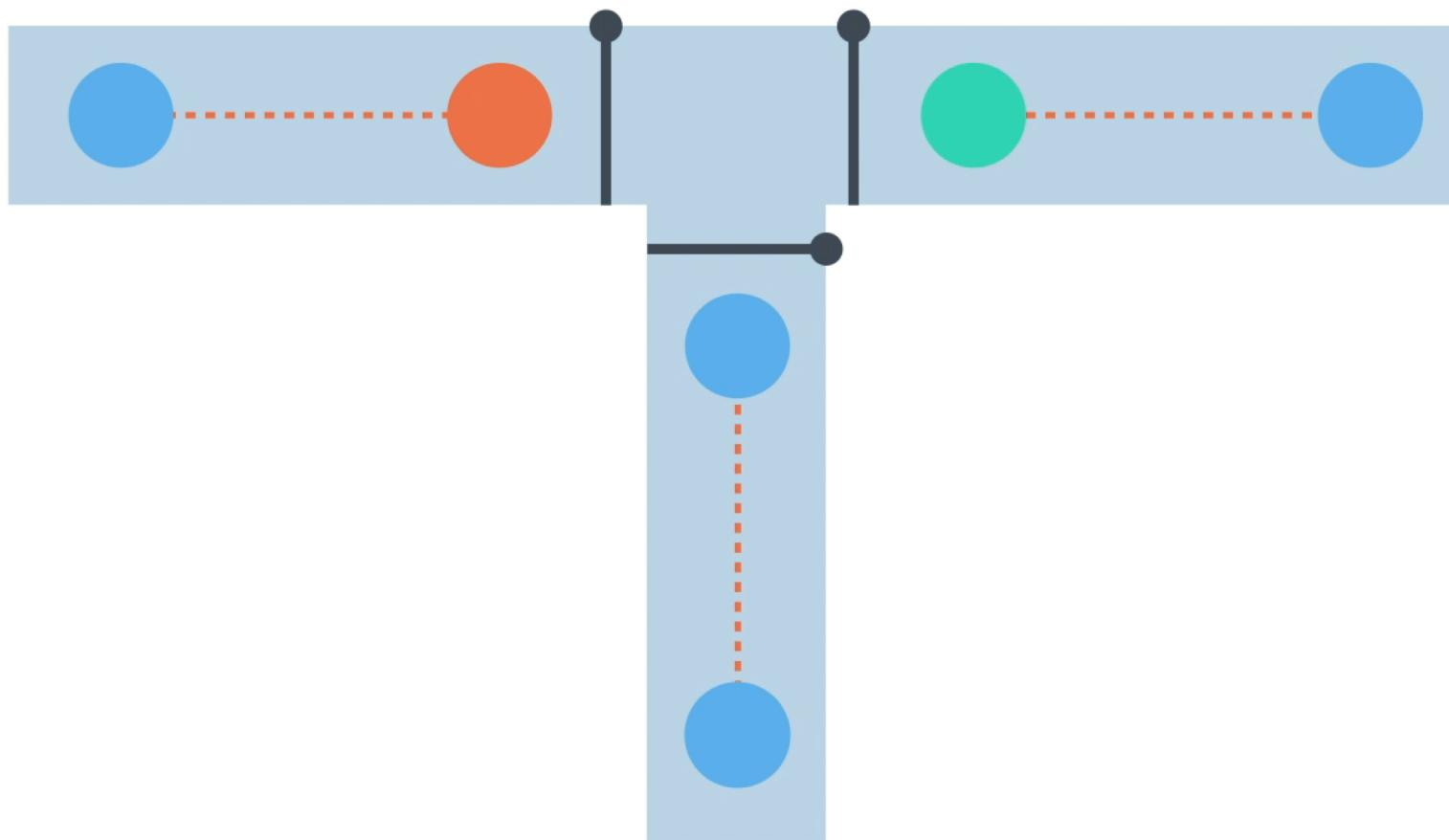


Mourik, Zuo et al, Science **336**, 1003 (2012).

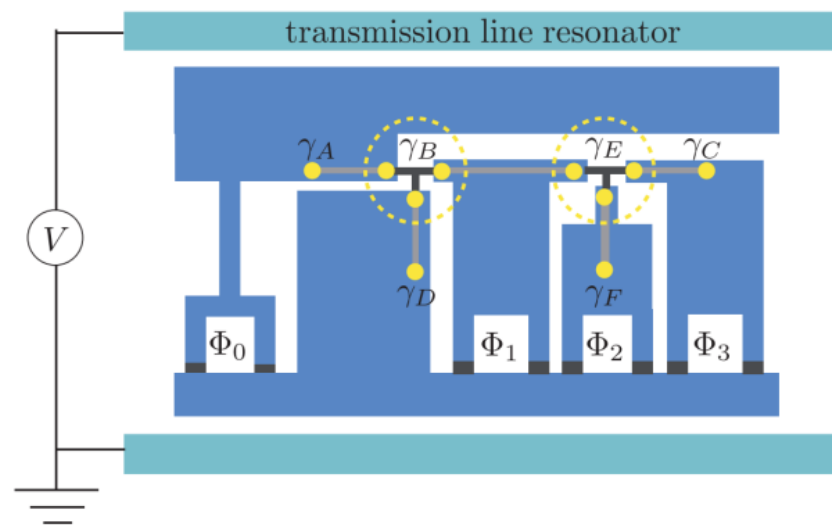




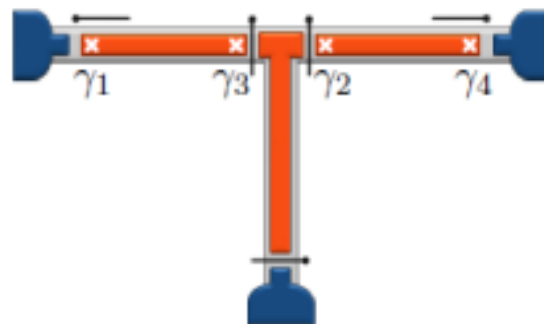
Interaction-based braiding



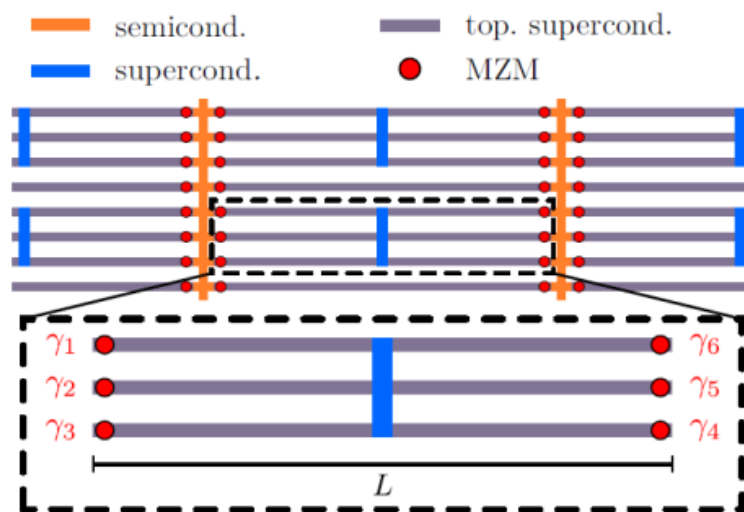
Interaction-based braiding



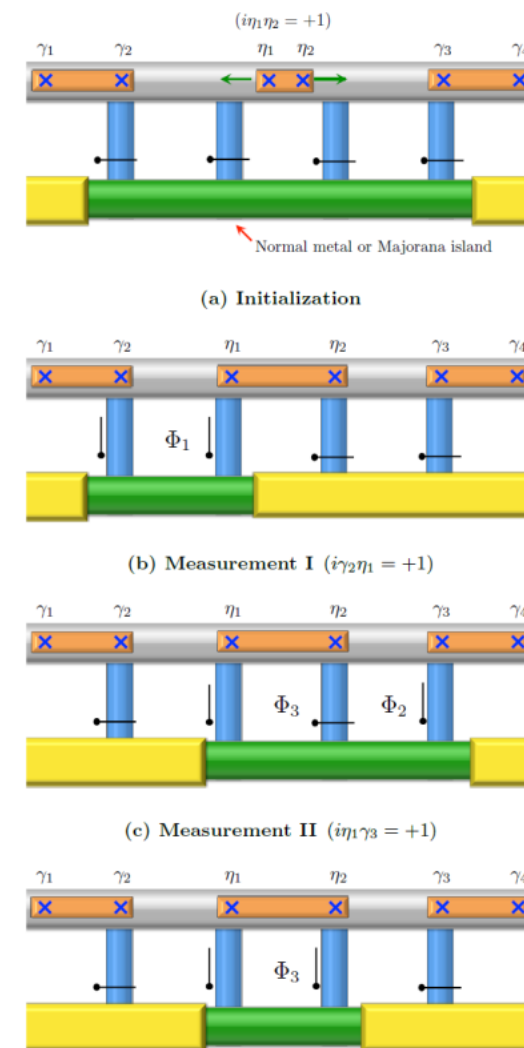
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