

# 최형국

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대표논문

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1. I. Sivan<sup>\*,†</sup>, **H. K. Choi<sup>\*,†</sup>**, Jinhong Park, A. Rosenblatt, Yuval Gefen, D. Mahalu, V. Umansky, Observation of Interaction-Induced Modulations of a Quantum Hall Liquid's Area, *Nature Communications* **7**, 12184 (2016).
2. **H. K. Choi<sup>\*,†</sup>**, I. Sivan<sup>\*,†</sup>, A. Rosenblatt, M. Heiblum, V. Umansky, D. Mahalu, *Robust electron pairing in the integer quantum Hall effect regime*, *Nature Communications* **6**, 7435 (2015).
3. E. Weisz<sup>\*</sup>, **H. K. Choi<sup>\*</sup>**, I. Sivan, M. Heiblum, Yuval Gefen, D. Mahalu, V. Umansky, *An electronic quantum eraser*, *Science* **344**, 1363 (2014).  
- Perspective, "Electronically erased", *Science* **344**, 1344 (2014).
4. M. Seo, C. Hong, S.-Y. Lee, **H. K. Choi**, N. Kim, Y. Chung, V. Umansky, D. Mahalu, *Multi-Valued Logic Gates based on Ballistic Transport in Quantum Point Contacts*, *Scientific Report* **4**, 3806 (2014).
5. M. Seo, **H. K. Choi**, S.-Y. Lee, N. Kim, Y. Chung, H.-S. Sim, V. Umansky, D. Mahalu, *Charge Frustration in a Triangular Triple Quantum Dot*, *Phys. Rev. Lett.* **110**, 046803 (2013).  
- News & Views, "A frustrated trio", *Nature* **495**, 321 (2013).
6. E. Weisz, **H. K. Choi**, M. Heiblum, Yuval Gefen, V. Umansky, D. Mahalu, *Controlled Dephasing of an Electron Interferometer with a Path Detector at Equilibrium*, *Phys. Rev. Lett.* **109**, 250401 (2012).