

**Brynmor Chapman**

MIT CSAIL  
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Cambridge, MA 02139  
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**Interests:** Complexity theory  
Formal verification  
Property testing  
Computability theory

**Education:** **Massachusetts Institute of Technology** (Cambridge, MA)  
Ph.D. in Computer Science (2017-present)  
Advisor: Ryan Williams

**Stanford University** (Stanford, CA)  
Master of Science in Computer Science (2016)

**University of Oxford** (Oxford, UK)  
Master of Arts (2017)  
Bachelor of Arts in Mathematics and Computer Science (2013)

**Research:** **University of California, Berkeley** (Berkeley, CA)  
Visiting scholar 2015

**Oregon Health & Science University** (Portland, OR)  
Research assistant 2010-2011

**Honors:** NSF Graduate Research Fellow (2015-2018)  
Oxford University Junior Mathematics Prize (2013)  
Oxford University First Class Degree with Distinction (2013)  
St. John's College Scholarship (2011-2013)

**Publications:** **B. Chapman** and R. Williams. Black-Box Hypotheses and Lower Bounds.  
Pending, submitted to STOC 2021.

S. Almagor, **B. Chapman**, M. Hosseini, J. Ouaknine, and J. Worrell. Effective Divergence Analysis for Linear Recurrence Sequences. In CONCUR, 2018.

**B. Chapman**. The Gotsman-Linial Conjecture is False. In SODA, 2018

**B. Chapman** and R. Williams. The Circuit-Input Game, Natural Proofs, and Testing Circuits with Data. In ITCS 2015.

**B. Chapman**, O. Davulcu, J. Skalicky, R. Bruschweiler, and M. Chapman.  
Parsimony in Protein Conformational Change. In Structure 2015.

M. Chapman, A. Trzynka, and **B. Chapman**. Atomic modeling of cryo-electron microscopy reconstructions - Joint refinement of model and imaging parameters. In Journal of Structural Biology 2013.

**Invited talks:** A Refutation of the Gotsman-Linial Conjecture  
University of Warsaw 2017

**Mentoring:** MIT Undergraduate Research Opportunity  
Korina Digalaki 2019-2020  
Malvika Joshi 2019-2020

Stanford Undergraduate Research in CS  
Rio Lavigne 2014

**Teaching:** Introduction to Algorithms (MIT 6.006)  
Teaching assistant 2019, 2020

Automata, Computability, and Complexity Theory (MIT 6.045)  
Guest lecturer 2019, 2020  
Teaching assistant 2019, 2020

Advanced Algorithms (MIT 6.854)  
Teaching assistant 2018

Computational Complexity (Stanford CS254)  
Guest lecturer 2015

Automata and Complexity Theory (Stanford CS154)  
Teaching assistant 2015

Parameterized Algorithms and Complexity (Stanford CS266)  
Teaching assistant 2014