

## NIMS Award 2021 受賞者

### Allan H. MacDonald 教授

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#### 経歴

1969-1973 St. Francis Xavier University, Canada, B.Sc.  
1973-1978 University of Toronto, Canada, Ph.D.  
1978-1981 Postdoctoral Research, National Research Council of Canada, Ottawa  
1981-1987 Research Scientist, National Research Council of Canada, Ottawa  
1987-2000 Professor of Physics, Indiana University, Bloomington IN, USA  
2000- Professor of Physics, University of Texas, Austin TX, USA

#### 主な受賞歴

1987 Herzberg Medal ( Canadian Association of Physicists )  
2007 Oliver Buckley Prize ( American Physical Society )  
2012 Ernst Mach Honorary Medal ( Czech Academy of Sciences )  
2020 Wolf Prize ( Wolf Foundation )

#### 主な論文/出版物

- 1) "Moire bands in twisted double-layer graphene",  
Bistritzer, R.; MacDonald, Allan H., PNAS **108**, 12233 (2010).
- 2) "Universal Intrinsic Spin-Hall Effect", Sinova, Jairo; Culcer, Dimitri; Niu, Qian; Sinitsyn, N. A.; Jungwirth, T.; MacDonald, Allan H., Phys. Rev. Lett. **92**, 126603 (2004).
- 3) "Magnetoroton Theory of Collective Excitations in the Fractional Quantum Hall Effect",  
Girvin, S. M.; MacDonald, Allan H.; Platzman, P. M., Phys. Rev. B **33**, 2481 (1986).