

Institute for Basic Science

**NUCLEAR THEORY  
IN THE SUPERCOMPUTING ERA – 2018  
(NTSE-2018)**

**International Conference**

**Daejeon, Republic of Korea, October 29 – November 2, 2018**

**PROCEEDINGS**

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The primary motivation for the series of International Conferences “Nuclear Theory in the Supercomputing Era (NTSE)” (<http://www.ntse.khb.ru>) was the rapid growth of supercomputers and the impact they, along with theoretical and algorithmic developments, are having on nuclear theory. The first conferences in this series, “Horizons of Innovative Theories, Experiments, and Supercomputing in Nuclear Physics” (HITES-2012) and NTSE-2012, were hosted respectively by the Louisiana State University in New Orleans, Louisiana, USA in June 4–7, 2012 and by the Pacific National University, Khabarovsk, Russia in June 18–22, 2012. These conferences were proceeded later under the common title NTSE. The NTSE-2013 was hosted by the Iowa State University, Ames, Iowa, USA in May 13–17, 2013 and celebrated the 70th birthday of Professor James Vary. The NTSE-2014 and the NTSE-2016 was hosted by the Pacific National University, Khabarovsk, Russia in June 23–27, 2014 and September 19–23, 2016 respectively.

These proceedings includes talks presented at the NTSE-2018 Conference hosted by the Institute for Basic Science in the city of Daejeon, Republic of Korea, from October 29th through November 2nd, 2018. The Conference was sponsored by the Institute for Basic Science (Republic of Korea), Rare Isotope Science Project (Republic of Korea), Korea Institute of Science and Technology Information (Republic of Korea), Center for High Energy Astrophysics (Republic of Korea), Pacific National University (Khabarovsk, Russia) and by the RAON Users Association (Republic of Korea).

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