Highlights

- Dr. Petr Dementyev granted with Liebig-Stipendium

- "Wie schnell expandiert das Weltall?" Prof. Dominik Schwarz schreibt in Spektrum der Wissenschaft (German)

- Physicist Mark Schüttpelz receives Tycho-Jæger Prize

- Gender Professorship at Faculty of Physics and BINAS since SS2018
- Largest molecular spin found close to a quantum phase transition

- DFG Research Unit 2692 *Fundamental Aspects of Statistical Mechanics and the Emergence of Thermodynamics in Non-Equilibrium Systems* funded
• **Healthy aging: New EU project on the human liver**

• **Spin current from heat: new material increases efficiency**

• **Dancing electrons lose the race**

• **Collaborative Research Center TransRegio of the Theoretical High Energy Physics Group in collaboration with University Frankfurt and TU Darmstadt funded**
Healthy aging: New EU project on the human liver - Bielefeld University to coordinate programme with partners from nine countries.

Chip-based nanoscopy: Microscopy in HD quality - New invention at Bielefeld University and the University of Tromsø (Norway)

Optical tractor beam traps bacteria - Physicists from Bielefeld University report on new methods in ‘Nature Communications’
• **Physicists find new explanation for key experiment** - Researchers at Bielefeld University publish findings on spin caloritronics and are the first to apply measurement methods in the field

• **Hot electrons point the way to perfect light absorption** - Physicists study how to achieve perfect absorption of light with the help of rough ultrathin films

• **Filtering pollutants with nanomembranes** - Bielefeld University participating in two European research networks

• **Cooling with molecules** - Researchers at the universities in Bielefeld, Manchester, and Zaragoza present low-temperature experiment in Nature Communications