

### **ESF Research Networking Programs**

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## ESF Research Networking Programmes:

Research Networking Programmes (RNPs) lay the foundation for **nationally funded research groups** to address major scientific and research infrastructure issues, in order to advance the frontiers of existing science. These **long-term programmes**, subject to selection through an open call and an international peer review process, must deal with **highquality science** and demonstrate the **added value of being carried out at the European level**.





## ESF RNP activities quality & impact:

Types of activities as applicable:

a) Meeting or **exchange activities** (conferences, workshops, schools, short and exchanges visits)

b) Activities linked to the establishment of databases, registries or similar **infrastructures** 

c) Other activities including scientific-strategic actions, **collaboration with industry**, etc.





## Estonian participation during 7FP:

Estonian research groups participated in 24 of ESF RNPs incl.:

- Physical and Engineering Sciences (PEN/PESC) 8;
- Life, Earth and Environmental Sciences (LEE/LESC) 6;
- Social Sciences (SOC/SCSS) 3;
- Humanities (HUM/SCH) 3;
- Interdisciplinary 4.

Coordinators: TÜ – 13, KBFI – 6, EMÜ – 3, TTÜ – 1, TLÜ – 1

Yearly fees ca 60,000 EUR, varies over years

Total cost ca 280,000 EUR



## Estonian participation during 7FP:

Natl Inst of Chem Phys & Biophys (KBFI/NICPB) has participated in 6 RNPs: Uuve Kirso: Interdisciplinary Tropospheric Research from the Laboratory to Global Change (<u>INTROP</u>) 2004 - 2009;

RS: Highly Frustrated Magnetism (<u>HFM</u>) 2005 - 2010

Enno Joon: Nanoscience and Engineering in Superconductivity (<u>NES</u>) 2007-2012;

Tõnu Kesvatera: Mapping the Detailed Composition of Surface-absorbed Protein Layers on Biomaterials and Nanotoxicity (<u>EpitopeMap</u>) 2007-2012;

RS: Interdisciplinary Approaches to Functional Electronic and Biological Materials (<u>IntelBioMat</u>) 2008-2010

RS: Common perspectives for cold atoms, semiconductor polaritons and nanoscience (POLATOM) 2010 - June 2015

### Highly Frustrated Magnetism (HFM)



LIST OF <u>SCIENCE MEETINGS</u> WITHIN HFM (18): 2005: 1; 2006: 2; 2007: 3; 2008: 4; 2009: 2; 2010: 6 HFM was supporting two types of <u>grants</u>:

1. Short Visit of up to 15 days

# 2. Exchange Grants from 15 days to six monthsSteering Committee:Chair: PhilippeMendels, CNRS, France

Members (12), Guest members (3)



## Interdisciplinary approaches to functional electronic and biological materials (<u>INTELBIOMAT</u>)



A programme of **workshops, schools,** and **exchange visits** is targeted at the understanding, modeling and design of **functional materials**. Materials functionality is often based on phenomena that are poorly understood at a predictive level either because of inherently strong interactions (e.g. magnetism, ferroelectricity, superconductivity) or complex structure (e.g. composites, oxides, biomaterials), and increasingly both. Our proposal brings together different communities: **materials scientists, experimentalists,** and **theorists**. Together with an established (and US National Science Foundation - funded) programme I2CAM, our network will acquire an international dimension across North America and Asia

Common perspectives for cold atoms, semiconductor polaritons and nanoscience <u>POLATOM</u> http://polatom-esf.org/



#### Keywords

Bose-Einstein condensates; microcavity polaritons; novel light emitters, entanglement, parametric scattering, cold atoms, nanoscience, quantum liquids, superfluidity and quantum transport, atomtronics

#### 2 Events in 2015:

### Final POLATOM meeting, conference (22-24/06/15), school (20-

**21/06/15)** Location : 20 - 24 June 2015, Physikzentrum Bad Honnef, Germany; Convened by : Hartmut Haug (DE)

International Winter School and Workshop on Strongly correlated fluids of light and matter Dates and location : 12 - 23 January 2015, ECT\* facilities in Villazzano near Trento, Italy; Convened by : Iacopo Carusotto (IT)



## ESF Research Networking Programmes:

**EARS** 

1974-2014

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Thanks to ESF!

Thank you for your attention!