# CURRICULUM VITAE


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| *Name:* | Annamária Kiss |
| *Nationality:* | Hungarian |
| *Date of birth:* | 05.02.1976 |
| *Working place:* | MTA Wigner Research Centre for Physics, SZFI<br>Department of Theoretical Solid State Physics,<br>Building I. 110/a |
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## STUDY:

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| 1994 – 1999 | Budapest University of Technology and Economics,<br>Diploma in Physics |
| 1999 – 2003 | Budapest University of Technology and Economics, Doctoral Course |
| 2004 | Ph.D. degree, Physics |

## WORK:

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| 1999 – 2003 | MTA Research Institute for Solid State Physics and Optics, young researcher |
| 2003 – 2004 | Budapest University of Technology and Economics, Department of Physics<br>research assistant |
| 2004 – 2008 | Tohoku University (Sendai, Japan), Department of Physics, research assistant |
| 2008 – 2009 | Tohoku University (Sendai, Japan), Department of Physics, JSPS fellow |
| 2009 – 2011 | Budapest University of Technology and Economics, Department of Physics,<br>Magyary Zoltán postdoctoral fellow |
| 2011 – 2015 | MTA Wigner Research Centre for Physics, SZFI, Marie Curie fellowship |

## FELLOWSHIP:

* *Japan Society for the Promotion of Science (JSPS)* fellowship, 2008-2009.
* Magyary Zoltán postdoctoral fellowship, 2009-2011.
* Marie Curie international reintegration grant (IRG FP7), 2011-2015.

## PUBLICATIONS:

*Number of papers:* 22
*Independent citations:* 219
*Hirsch-index:* 8

## KNOWLEDGE OF LANGUAGES:

* English, intermediate state exam
* French, intermediate state exam
* Japanese

## TEACHING ACTIVITY:

2000 *Electrodynamics*, Budapest University of Technology and Economics

2001 *Experimental Physics*, Budapest University of Technology and Economics

## VISITS:

2002, 1 month École Politechnique Fédérale de Lausanne, Switzerland

2003, 1 month Philipps-Universität, Marburg, Germany

2004 – 2009 Tohoku University, Sendai, Japán

* 2006 January, 1 week: Institute for Solid State Physics (ISSP), University of Tokyo, Kashiwa
* 2006 May, 1 week: Japan Atomic Energy Agency (JAEA), Tokai
* 2006 July, 1 week: Hokkaido University, Sapporo
* 2007 November, 1 week: Iwate University, Morioka

## RESEARCH INTEREST:

strongly correlated electron systems, magnetic properties of rare earth and actinides, multipolar orderings,Kondo problem, quantum Monte Carlo simulation, spintronics

## COLLABORATIONS:

- Prof. Y. Kuramoto, Dr. J. Otsuki, Dr. S. Hoshino (Tohoku University, Sendai, Japan)
- Prof. H. Kusunose (Ehime University, Matsuyama, Japan)
- Prof. Karlo Penc, (MTA Wigner Research Centre for Physics, Hungary)
- Prof. Ferenc Simon, (Budapest University of Technology and Economics, Hungary)
- Dr. Balázs Dóra, (Budapest University of Technology and Economics, Hungary)

## CONFERENCE PARTICIPATION:

### Oral presentations:

1) *"Magnetic impurity models with strong potential scattering: Reverse Kondo effect"*, Seminar of European Graduate College (EGC), Ráckeve, Hungary, 2011. August 21-24.

2) *"Experimental observations in $PrFe_4P_{12}$ from theoretical point of view"*, The 6th Skutterudite Workshop, ISSP, Kashiwa, Japan, 2008. July 11-13 (invited speaker).

3) *"Scalar order in $PrFe_4P_{12}$ and related systems"*, Nemzetközi Konferencia "New Quantum Phenomena in Skutterudite and Related Systems", Kobe, Japan, 2007. September 26-30 (invited speaker).

4) *"Theoretical analysis of $^{31}P$ NMR spectra in $PrFe_4P_{12}$"*, Skutterudite Workshop, Hachimantai (Morioka), Japan, 2006. November 8-10.

5) *"Mean field theory for the magnetic behavior of $NpTGa_5$ (T=Co, Ni, Rh)"*, Prágai kollokvium "$f$-electron systems" címmel, Praha, Check Republic, 2006. September 8-11 (invited speaker).

6) *"Mean-field theory for the magnetic phase diagram of $NpTGa_5$ (T=Co, Ni, Rh)"*, JPS meeting, Doshisha University, Kyotanabe Campus, Japan, 2005. September 19-22.

7) *"Quadrupolar ordering in $PrFe_4P_{12}$ skutterudite"*, 21st Century COE Symposium Exploring New Science by Bridging Particle-Matter Hierarchy, Tohoku University, Sendai, Japan, 2005. March 4-5.

8) *"Notes on the new high-field phase in $PrFe_4P_{12}$ skutterudite"*, The Third Workshop on Evolution of New Quantum Phenomena Realized in the Filled Skutterudite Structure, Kobe University, Kobe, Japan, 2005. January 6-8.

9) *"Octupolar ordering in magnetic fields"*, a European Graduate College (EGC) szemináriuma, Riezlern, Austria, 2003. August 31-September 6.

10) *"Pr ordering in filled skutterudite $PrFe_4P_{12}$"*, Seminar of European Graduate College (EGC), Ráckeve, Hungary, 2002. September 3-9.

## Poster presentations:

1) *"Theory of the crossover behavior in $SmRu_4P_{12}$"*, JPS meeting, Iwate University, Morioka, Japán, 2008. September 20-23.

2) *"Crossover behavior in $SmRu_4P_{12}$"*, The 6th Skutterudite Workshop, ISSP, Kashiwa, Japán, 2008. July 11-13.

3) *"Elastic anomaly and its field dependence caused by a scalar order: application to $PrFe_4P_{12}$"*, JPS meeting, Hokkaido University, Sapporo, Japan, 2007. September 21-24.

4) *"Theory of induced dipoles and octupoles for understanding P NMR spectra in $PrFe_4P_{12}$"*, JPS meeting, Kagoshima University, Kagoshima, Japan, 2007. March 18-21.

5) *"Role of induced dipoles and octupoles for understanding P NMR spectra in $PrFe_4P_{12}$"*, The 5th Skutterudite Workshop, ISSP, Kashiwa, Japan, 2007. January 8-10.

6) *"Effect of magnetic field on scalar order in Pr skutterudites"*, JPS meeting, Chiba University, Chiba, Japán, 2006. September 23-26.

7) *"Scalar order: possible scenario for the low-field phase of $PrFe_4P_{12}$"*, The 4th Skutterudite Workshop, Tohoku University, Sendai, Japan, 2006. June 1-3.

8) *"Mean-field model for magnetic orders in $NpTGa_5$ with T=Co, Ni or Rh"*, The 3rd COE Symposium: Exploring New Science by Bridging Particle-Matter Hierarchy, Tohoku University, Sendai, Japan, 2006. February 16-18.

9) *"Multipolar orderings in skutterudites"*, Joint Workshop on "NQP-skutterudites and NPM in multi-approach", Tokyo Metropolitan University, Tokyo, Japan, 2005. November 21-24.

10) *"Mean field model for the magnetic behavior of $NpTGa_5$ with T=Co, Ni and Rh"*, International Symposium on "Advances in the Physics and Chemistry of Actinide Compounds", Japan Atomic Energy Agency (JAEA), Tokai, Japan, 2005. September 27-29.