

# Prof. Dr. Manuel Angst

affiliated with the Peter Grünberg Institute – Scattering Methods (PGI-4)

Helmholtz Young Investigators Group:      Complex Ordering Phenomena in  
Multifunctional Oxides



“In the medium term, I plan to expand my group further and acquire third-party funding to pursue my work beyond the funded period. In the long term, I would be interested in a full professorship at a university.”

## Research project:

The group explores electronic (charge, spin, orbital) ordering phenomena in transition metal oxides and how these phenomena are linked to functionalities, in particular multiferroicity – the combination of magnetism and ferroelectricity. Such multiferroic materials have great

potential for applications in information technology, for example for the development of non-volatile storage elements that can be switched faster and with less waste heat being produced. Finding suitable materials that meet all the requirements is difficult and requires

a good understanding of diverse mechanisms of multiferroicity. To this end, we synthesize materials, mostly in a single crystalline form, and examine them mainly scattering methods (X-ray and neutron scattering).

## What is/has been the greatest challenge as head of a young investigators group?

“Probably to acquire additional third-party funds, but also to strike a balance between teaching obligations and research activities.”

<b>Start of funding period:</b>	April 2009
<b>End of funding period:</b>	March 2015
<b>Budget:</b>	€ 250,000 per year
<b>Staff:</b>	5 PhD students
<b>University affiliation:</b>	Junior professorship (salary grade W1) at RWTH Aachen University
<b>Cooperations:</b>	University of Cologne, University of Siegen, Tbilisi State University, Warwick University (selection of important cooperation partners)
<b>Further information:</b>	<a href="#">Young Investigators Group Prof. Angst</a>