

# Dr. Bernold Feuerstein

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## TORNADO AND SEVERE WEATHER RESEARCH IN EUROPE

**TUESDAY, NOVEMBER 17**  
**1:30 P.M.**  
**CARDWELL HALL 119**



Dr. Bernold Feuerstein earned his PhD in physics in 1999 at the Univ. of Freiburg (Germany). In 2002/3 he works as a research fellow in the group of Uwe Thumm at the KSU physics department. He is a KSU Alumnus since 2006 and physics lecturer at Heidelberg University (Germany). 2001-2007 he was a research associate (atomic, molecular and optical physics) at the Max Planck Institute for Nuclear Physics (MPIK) and became staff scientist and the press officer at MPIK in 2007. In 2006 he was a founding member of the European Severe Storms Laboratory (ESSL), 2006-2011 deputy director of the ESSL, and 2010 managing director of the ESSL.

Ingredient based theory of convective storms relies on the fact that the atmosphere follows the same laws of physics anywhere and anytime on this planet - i. e. it does not care about the geography nor the calendar. Once the ingredients are present, (severe) local weather events will be the consequence. In Europe, the total damage due to severe convective storms amounts 6 to 10 billion U.S. dollars per year. The talk will give an overview on tornado and severe weather research in Europe with special emphasis on the European Severe Weather Database (ESWD) operated by the ESSL. Starting with some historical remarks, exemplary case studies will be presented and recent results for the tornado climatology of Europe based on ESWD data will be discussed.