

# Call for Papers

04 - 07 March 2008

**Witten-Bommerholz**  
Germany

<http://www.gefs08.de>

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## 3rd International Workshop on Genetic and Evolving Fuzzy Systems

The past decade has witnessed a trend towards augmenting fuzzy systems with learning and adaptation capabilities. One of the most prominent approaches to hybridize fuzzy systems with learning and adaptation methods has resulted in the emergence of *genetic fuzzy systems*, which meld the approximate reasoning method of fuzzy systems with the adaptation capabilities of evolutionary algorithms. Another evolution-inspired paradigm, *evolving fuzzy systems*, emerged as a promising tool to address designing and learning fuzzy systems learning in on-line mode and in real-time. Fuzzy systems have demonstrated the ability to formalize in a computationally efficient manner the approximate reasoning typical of humans. Evolution-inspired algorithms constitute a robust technique in complex optimization, identification, learning, and adaptation problems. Their confluence leads to increased capabilities for the design and optimization of fuzzy systems.

GEFS'08 will become the third workshop in a series of highly successful symposiums dedicated to serving the needs of academics and practitioners in computational intelligence. The first two productive workshops in Granada, Spain and Ambleside, UK were attended by over 60 participants. The objective of GEFS'08 is to facilitate the promotion of novel problems, research, results and future directions in the emerging area of genetic and evolving fuzzy systems. GEFS'08 will provide an opportunity to meet old friends, making new contacts and exchange ideas.

The workshop programme without being limited to will focus on:

### Genetic Fuzzy Rule-Based Systems

- Evolutionary Algorithms for Learning and Tuning Fuzzy-Rule Based Systems
- Evolutionary Design of Fuzzy Rule Based Systems
- Evolutionary Fuzzy Modeling
- Computational Intelligence

### Evolving Fuzzy Systems

- Evolving Neuro-Fuzzy Systems and Models
- On-line Identification of Fuzzy Systems and Real-Time Algorithms
- Evolving Fuzzy Clustering Methods
- Evolving Fuzzy Classifiers

### Real-world applications

- Robotics
- Control Systems
- Industrial Applications
- Data Mining and Knowledge Discovery

The workshop will take place in Witten-Bommerholz – located at the southern border of the Ruhr Area. 150 years of industrial history have given the Ruhr Area its current structure, made it into one of the largest European centres of population, to a melting pot of nations and cultures. The Dortmund University conference centre Witten-Bommerholz provides ideal facility for small conferences and workshops with its dining services and 38 modern guest rooms at hotel standard.

Paper submission, tutorial, special sessions	1 October, 2007
Acceptance notification, early registration	10 December, 2007
Final version due	1 February, 2008
Workshop	4-7 March, 2008

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