



# CALL FOR PAPERS

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 Salerno, Italy

### Conference Contact Information

Stefano Coraluppi  
 coraluppi@nurc.nato.int  
 +39 0187 527 304

Peter Willett  
 willett@engr.uconn.edu  
 +1 860 486 2195

[www.fusion2006.org](http://www.fusion2006.org)



**Overview.** The 9<sup>th</sup> International Conference on Information Fusion will be held in Florence, Italy, at the *Convitto della Calza* Convention Centre. Authors are invited to submit papers describing advances and applications in information fusion, with submission of non-traditional topics encouraged.

**Conference Site.** Lying in the heart of Tuscany, surrounded by gentle green hills, Florence is a unique treasure chest of works of art. Florence is the home of Dante, Giotto and Botticelli. Leonardo da Vinci, Michelangelo, and Raphael all came to Florence to learn about art and to teach it. Renaissance buildings, churches and museums like the *Uffizi* gallery provide an extraordinary voyage through the history of art. The coastline is approximately an hour's distance, as are the notable Italian centers of Pisa and Siena. Florence is served by a modern international airport.

The conference venue is the *Convitto della Calza*, a former monastery built in the 14th century. It is strategically located in the heart of the historical center, surrounded by remarkable works of the Renaissance, and close to the *Boboli Gardens* and *Palazzo Pitti*.

**Topics of interest** include (but are not limited to) the following:

#### 1. Foundational tools

Probability theory; non-Bayesian approaches to uncertainty representation; random sets; fuzzy logic; risk-sensitive approaches; fusion modeling; agents; genetic optimization.

#### 2. Technological advances

Sensor modeling (radar, active and passive sonar, acoustic, seismic, magnetic, optical, visual, infrared); fusion-related hardware, software and communications technology.

#### 3. Algorithmic developments

Classification; data mining; nonlinear filtering and smoothing; contact-based tracking algorithms; combined detection/tracking; resource management; distributed fusion; active and passive data fusion; data registration; image fusion; database fusion.

#### 4. Application areas

Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR); network centric warfare; decision support; situation assessment; computer vision; economics and finance; condition monitoring; medical diagnostics and biological systems; robotics; intelligent transportation systems; security.

**Paper Submissions.** Prospective authors are invited to submit 4-8 page papers through the conference website ([www.fusion2006.org](http://www.fusion2006.org)), where paper templates and submission instructions are available, by 15 January 2006.

**Special Session Proposals.** Proposers are invited to submit by email ([coraluppi@nurc.nato.int](mailto:coraluppi@nurc.nato.int), [willett@engr.uconn.edu](mailto:willett@engr.uconn.edu)) the theme of the special session, as well as the list of committed papers, by 1 December 2005.

**Tutorial Proposals.** The first day of the conference will be devoted to tutorials on information fusion. Organizers for proposed tutorials are invited to submit by email ([marano@unisa.it](mailto:marano@unisa.it)) a title and description for their tutorial, by 15 January 2006.

**Student Paper Program.** Fusion 2006 is featuring a student paper program to encourage the involvement of young engineers and scientists in information fusion research. Conference fees will be waived for the leading author of the best paper. Further details are available at the Conference website.

**Invited Speakers.** Fusion 2006 will include the following invited talks:

- Dr. Nils Sandell (BAE Systems Advanced Information Technologies), *Fusion Technology and Applications: A Retrospective and Some Thoughts about the Future.*
- Dr. Marcel Hernandez (QinetiQ), *Performance Measures for Sensor Management: Computationally Efficient Formulations and Associated Applications.*
- Dr. Roy Streit (Metron), *The PMHT and Related Applications of Mixture Densities.*

#### Important deadlines

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|--------------------------|-----------------|
| Special session proposal | 1 December 2005 |
| Tutorial proposal        | 15 January 2006 |
| Regular paper submission | 15 January 2006 |
| Acceptance of papers     | 1 April 2006    |
| Final papers             | 15 May 2006     |
| Early registration       | 1 June 2006     |

