14TH INTERNATIONAL REAL-TIME ADA WORKSHOP IRTAW-14

7-9 October 2009 Portovenere Italy

http://events.math.unipd.it/irtaw14/

CALL FOR PAPERS

For over 20 years the series of **International Real-Time Ada Workshop** meetings has provided a forum for identifying issues with real-time system support in Ada and for exploring possible approaches and solutions, and has attracted participation from key members of the research, user, and implementer communities worldwide. Recent IRTAW meetings have significantly contributed to the Ada 2005 standard, especially with respect to the tasking features, the real-time and high-integrity systems annexes, and the standardization of the Ravenscar profile.

In keeping with this tradition, and in light of Ada 2005 implementations beginning to appear, and thought of post Ada 2005 language changes, the goals of **IRTAW-14** will be to:

- examine experiences in using Ada 2005 for the development of real-time systems and applications;
- report on or illustrate implementation approaches for the real-time features of Ada 2005;
- consider the added value of developing other real-time Ada profiles in addition to the Ravenscar profile;
- examine the implications to Ada of the growing use of multiprocessors in the development of real-time systems, particularly with regard to predictability, robustness, and other issues;
- examine and develop paradigms for using Ada 2005 for real-time distributed systems, taking into account robustness as well as hard, flexible and application-defined scheduling;
- consider the definition of specific patterns and libraries for real-time systems development in Ada;
- identify how Ada relates to the certification of safety-critical and/or security-critical real-time systems;
- review the status and contents of ISO reports related to real-time Ada and consider the interest of developing new secondary standards or extensions;
- examine the status of the Real-Time Specification for Java and other languages for real-time systems development, and consider user experience with current implementations and with issues of interoperability with Ada in embedded real-time systems;
- consider the lessons learned from industrial experience with Ada and the Ravenscar Profile in actual real-time projects;
- consider the language vulnerabilities of the Ravenscar and full language definitions.

Participation at **IRTAW-14** is by invitation following the submission of a position paper addressing one or more of the above topics or related real-time Ada issues. Alternatively, anyone wishing to receive an invitation, but for one reason or another is unable to produce a position paper, may send in a one-page position statement indicating their interests. Priority will, however, be given to those submitting papers.

Position papers should not exceed ten pages in typical IEEE conference layout, excluding code inserts. All accepted papers will appear, in their final form, in the Workshop Proceedings, which will be published as a special issue of *Ada Letters* (ACM Press). Selected papers will also appear in the Ada User Journal.

Please submit position papers, in PDF format, to the Program Chair by e-mail: neil@cs.york.ac.uk

Program Committee

Neil Audsley (Program Chair), Ben Brosgol, Alan Burns, Michael González Harbour, Stephen Michell, Javier Miranda, Luís Miguel Pinho, Juan Antonio de la Puente, Jorge Real, José Ruiz, Tullio Vardanega (Local Chair) and Andy Wellings.

Important Dates

Receipt of Position Paper:

Notification of Acceptance:

Final Copy of Paper:

Workshop Date:

8 May 2009

22 May 2009

16 September 2009

7-9 October 2009