Session S/I-04:
Co-Robotics and Tele-Presence

Session Abstract:
Because humans are inherently capable of tremendous levels of resilience, system resilience can be greatly enhanced by the inclusion of a human in the loop. This may include humans sharing the operating space with the robot (Co-Robotics), or humans involved in the control and operation of a remote robotic system (Tele-Presence). Examples in co-robotics and tele-presentation include resilience to unstructured and/or dynamic operating environments, resilience to communication latency or disruption, task variation, dynamic task assignment, etc. This session solicits papers addressing these topics.

Topics:
Topics for this session include, but are not limited to:
- Human detection and tracking algorithms
- Shared workspaces
- Human-robot cooperative operation
- Novel human/robot interaction methods
- Tele-presence systems
- Resilient tele-presence systems
- Hybrid tele-presence/autonomous systems
- Tele-presence augmentation via computer intelligence
- Multi-modal tele-presence interfaces

Chairs:
- Chair: Corrie Nichol, Ph.D. Idaho National Laboratory
- Co-Chair: Prof. Mark Colton, Ph.D. Brigham Young University

Authors’ Schedule:
- Paper submission deadline: April 2, 2012
- Notification of acceptance: June 4, 2012

Submission of Papers:
Papers must be submitted electronically through the electronic submission system. For further details please consult the conference web pages for the paper template.