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Introduction

These proceedings contain the technical papers that were presented at the 2012 conference on Automatic Target Recognition (ATR).

This was the 22nd in a series of international conferences that are dedicated to the science and technology of automatic target recognition. Once again this meeting, this year held in Baltimore, Maryland, provided the forum for discussing the issues, problems, and solutions associated with the new roles that are being demanded of the ATR technology.

To encourage excellence in research leading to noteworthy publications in the field of ATR technology a few years ago, with help from Lockheed Martin Corporation, we initiated the annual Best ATR paper Awards. This year we had two winners: “Improving FLIR ATR performance in a turbulent atmosphere with a moving platform,” authored by D. Baumgartner and B. Schachter, both from Northrop Grumman Corporation, and “High-range-resolution (HRR) ATR via non-negative matrix approximations,” authored by V. Riasati, MacAulay-Brown, Inc., U. Srinivas, and V. Monga, both from Pennsylvania State University.

We thank the authors, speakers, session chairs, committee members, the SPIE coordinators and all participants that once again, through their enthusiasm and active participation, made this year’s conference and working group meeting, educational, enjoyable, and successful.

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