



Proceedings of the Fifteenth International Symposium on Space Terahertz Technology

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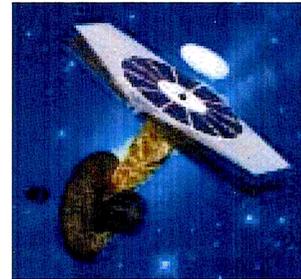
*April 27-29, 2004
Hotel Northampton
Northampton, Massachusetts*



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PREFACE

On behalf of the Organizing Committee, I wish to thank all of the authors and the presenters who have done a wonderful job of making this Symposium successful and productive. The 15th International Symposium on Space Terahertz Technology was organized by the University of Massachusetts, Amherst, and was co-sponsored by the IEEE Microwave Theory and Techniques (MTT) Society, and by the Electromagnetics Division of the National Institute of Standards and Technology (NIST).

Forty-four abstracts were accepted for oral presentation, and twenty-eight papers were accepted for poster presentations. We also had three invited talks at the beginning of each day. The breakdown of the accepted abstracts in terms of the broad technology category is as follows:

Hot Electron Bolometers	15
SIS Technology	11
LO Sources	8
Direct Detectors	11
Terahertz Systems	13
Optics and Related Technologies	14

All of the accepted papers that have been submitted on time have been included in the proceedings. Only a handful of papers were not submitted and they have been replaced with the accepted abstracts. Online proceedings of the conference are also available at <http://www.stt2004.org>.

I would like to take this opportunity to thank people who helped in the organization of this symposium. Pamela Poissant and Denise Parent in the Department of Astronomy at UMass helped tremendously in the administrative aspects of the symposium. Barbara Keyworth, Dept. of Astronomy helped arrange the reception. Karen Werner provided invaluable help, especially in the compilation of the submitted abstracts, and in computer support for the conference. Financial support from NIST and Millitech, Inc. are gratefully acknowledged. Special thanks go to our technical review committee listed below for helping to review all the submitted abstracts. I also want to thank our dedicated team of staff member and graduate student volunteers who were on hand to make the event a success.

Gopal Narayanan
(UMass, Amherst)

Organizing Committee

Gopal Narayanan
Neal Erickson
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Sigfrid Yngvesson

Technical Committee

Al Betz
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Tony Kerr
Erik Kollberg
Harvey Moseley
Antti Raisanen
Edward Tong
Chris Walker
Nick Whyborn

Please note the dates and location for the 16th International Symposium on Space Terahertz Technology to be held in 2005:

May 2-4, 2005

Chalmers University of Technology, Göteborg, Sweden. (<http://www.mc2.chalmers.se/conferences/ISSTT>)

Organizers: Jan Stake, Harald Merkel, Victor Belitsky, and Erik Kollberg.

15th International Symposium on Space Terahertz Technology

Invited Talks

0.1 James Webb Space Telescope, SAFIR, SPECS, and the future of Space Astronomy 1

John C. Mather¹, Dan Lester², and Harold Yorke³

1 NASA's Goddard Space Flight Center Greenbelt, MD

2 Astronomy Department, University of Texas, Austin

3 Jet Propulsion Laboratory

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Nick Whyborn¹, Thijs de Graauw¹, Emmanuel Caux², Tom Phillips³, Juergen Stutzki⁴

1 SRON

2 CESR, Toulouse, France

3 Caltech

4 KOSMA, Koln

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1 Chalmers University of Technology

2 Moscow State Pedagogical University, Moscow

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2 Delft University of Technology

3 California Institute of Technology

4 Moscow State Pedagogical University

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3 Conceptual Analytics, Glenn Dale, MD	
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