



Call for Papers

12th Coherent Laser Radar Conference

15 - 20 June 2003

Bar Harbor, Maine
Atlantic Oaks Hotel and Conference Facility



Abstract & Summary Deadline:

14 March 2003

<http://www.lidar.com/clrc12/index.htm>





Introduction

Coherent Laser Radar: Technology and Applications will be the twelfth conference in a series beginning in 1980. This conference series provides a forum for exchange of information on recent events, current status, and future directions of coherent laser radar (or lidar or ladar) technology and applications. The emphasis of this planned conference will be on the latest advancements in the field, including theory, modeling, components, systems, instrumentation, measurements, calibration, data processing techniques, operational uses, and comparisons with other remote sensing technologies.

Past conferences have occurred every other year and alternated between the United States and Europe.

Sequence	Year	Location
1	1980	Aspen, CO USA
2	1983	Aspen, CO USA
3	1985	United Kingdom
4	1987	Aspen, CO USA
5	1989	Munich, Germany
6	1991	Snowmass, CO USA
7	1993	Paris, France
8	1995	Keystone, CO USA
9	1997	Linköping, Sweden
10	1999	Mount Hood, OR USA
11	2001	Great Malvern, UK
12	2003	Bar Harbor, ME USA

The conference serves as a biannual forum for the exchange of information on current and future developments within the field of coherent laser radar. It is intended that the meeting will highlight recent advancements in the field, including component technology and instrumentation, systems (surface, airborne, and space-based), measurements and processing techniques, and emerging requirements for coherent laser radar applications in studies of atmospheric, ocean, surface, and target properties. Contributions describing the calibration of coherent laser radar systems and factors affecting system performance, such as atmospheric turbulence, backscatter, and extinction properties, are applicable to the meeting.



Conference Scope

The conference will include both invited and contributed papers on all aspects of coherent laser radar. The emphasis will be on the latest advances in the field including technology development, systems integration, signal processing and in-depth analysis of measurement campaigns.

Topics to be considered are:

- Optical system technologies (transmitter sources, receivers, fiber optics, and other optical components)
- Advances in signal processing (theory, simulation and hardware)
- Atmospheric propagation (refractive turbulence and absorption)
- Hard target coherent lidar (imaging, ranging, tracking, vibrometry)
- Wind lidar (meteorology, air turbulence measurements)
- Coherent DIAL (chemical detection, pollution dispersion)
- Target characterization (speckle, signal statistics, cross-sections)
- Comparison between CLR and other remote sensing technologies, data fusion
- Novel applications of coherent lidar



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MIT Lincoln Laboratory (USA)
Kazu Asai, Co-chairman
Tohoku Institute of Technology, Sendai (Japan)

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Stefan Rahm
German Aerospace Establishment, (Germany)
Gary Spiers
Jet Propulsion Laboratory, NASA, (USA)



MEETING FORMAT

The conference is scheduled to run from Sunday 15 June through Friday 20 June 2003. Oral and poster presentations will be scheduled along with informal topical discussion sessions.

SUBMISSION OF PAPERS

All abstracts and summaries must reach the CLR Conference Organization by 15 March 2003. Send your paper to:

R.M. Heinrichs (CLRC)
M.I.T. Lincoln Laboratory
244 Wood St.
Lexington, MA USA 02420-9185
email: HEINRICHS@LL.MIT.EDU
fax: 781-981-5069

Authors will be notified whether their papers have been accepted by the end of April. Notification will be sent to the author listed on the correspondence form unless alternative instructions are provided in a letter accompanying the paper. No material submitted will be returned to the authors.

PREPARATION OF ABSTRACT AND SUMMARY

A limited number of contributed papers covering original, unpublished work on the meeting subjects will be accepted for presentation. The scheduling for presentation will be determined when the program committee meets to review the papers in April.

Each author is requested to submit both a 50-word abstract and a summary of his or her paper. As contributed papers are selected on the basis of the summary, the summary should be as informative and as succinct as possible, not descriptive.



- **Abstract:** The abstract should be prefaced by the title of the submission at the top of the page in upper and lowercase letters, followed by the author's name, affiliation, complete return address, and telephone number. In the case of multiple authors, each author's name, affiliation, and address should be listed separately after the title. The use of scientific and engineering symbols as well as acronyms should be avoided in the abstract and title. Abstracts should be no longer than 50 words.

- **Summary:** A summary, of up to four pages, must accompany the abstract. Since conference proceedings will be reproduced directly from the material submitted by the author(s), the summary must be in a 8.5-in. x 1-in. format with 25-mm (1-in.) margins on all four sides. The author(s) must include within the four-page limit all text, equations, drawings, figures, and references. Tables, photographs, and drawings must appear on the page exactly as they are to be reproduced. The title of the talk and the authors' names, affiliations and complete return address must appear on the first page. The abstract should not be repeated in the summary. Do not use asterisks, acknowledgements, job descriptions, or footnotes. Cite references at the end of the summary.

Electronic submission of the abstract and summary is preferred, although hardcopy will also be accepted. PDF is the preferred electronic format with Word also acceptable. Submission can be either through email (< 10-Mb file) or by mailing a CD or Zip disk. Submitted materials will not be returned.

The enclosed copyright license form must be completed and submitted with the abstract and summary. This can be submitted either as hard copy or fax.

Conference proceedings will be generated directly from the material submitted by author(s) of selected papers and distributed at the meeting. The 50-word abstract of accepted papers will be published in the advance program of the meeting.

The conference committee may reject papers not fulfilling the above requirements. Registration for technical sessions is open to all members of the scientific and technical community. Authors must obtain appropriate approval to present their work to this international forum. (A Disclosure Authorization Form for Public Domain Sessions that is required for the technical digest and presentations is also attached.)



PRESENTATIONS

Electronic presentation of talks at the conference is recommended, although transparencies will also be supported. Windows and Mac PC's with Zip and CD drives will be available at the conference to support electronic presentations.

POSTER SESSIONS

The program committee will schedule both oral and poster sessions. For poster sessions each author is provided a bulletin board on which to display a summary of the paper. Authors must remain in the vicinity of the bulletin board for the duration of the session (60-90 minutes) to answer to the questions of attendees. The abstract and summary of both oral and poster papers are published in the advance program and digest respectively. Note that poster papers are not supplied with any audiovisual equipment. Those requiring such equipment should refrain from requesting the poster presentation format.

EXHIBITS

An informal exhibit of tabletop displays featuring pertinent equipment, materials, and literature will be held in conjunction with the meeting. Ample time will be allowed for all attendees to visit the exhibits during coffee breaks and to speak with representatives from the different companies. Those interested in taking part in the exhibition should contact the conference organization address above.

ADVANCE PROGRAM

Corresponding authors of each paper automatically receive an advance program. Other individuals who wish to receive the advance program should complete the attached form.

PREREGISTRATION/REGISTRATION

Preregistration is strongly encouraged for quick pick-up of registration materials and for your own convenience. The registration fee for the meeting includes the meeting reception, conference dinner and one copy of the technical digest.

Registration fee: \$400.00 by 6 June 2003



HOTEL ACCOMMODATION

The conference will occur at the Atlantic Oaks Hotel, located approximately one mile from the center of Bar Harbor. Since the conference dates are before the primary tourist season, accommodations at the hotel should be readily available with room rates generally around \$135/night. Hotel arrangements should be made directly with the Atlantic Oaks. Further information is located at: www.barharbor.com or www.acadiainfo.com/atlanticoaks.htm. Alternate accommodations are available in and around the Bar Harbor area. An incomplete list of alternate accommodations can be found at: www.acadiainfo.com/hotelhome.htm.

TRAVEL ARRANGEMENTS

Bar Harbor is a popular vacation spot next to Acadia National Park on Mount Desert Island, Maine. Bar Harbor is 270 miles (435 km) north of Boston and 50 miles (80 km) east of Bangor, Maine. Mount Desert island is accessible by car and is approximately 5 hours from Boston, Massachusetts, and 1 hour from Bangor, Maine.

Bar Harbor is a small town that combines tourism (restaurants, shops), local art galleries, and commercial fishing.

ACADIA NATIONAL PARK

Acadia National Park is located on Mount Desert island, adjacent to Bar Harbor. Recreation opportunities at the park include hiking, boating, kayaking, biking, and sightseeing. The eastern half of the island supports an array of “carriage paths”, which are well-groomed paths that support hiking and biking and do not allow motorized vehicles. The rocky coastlines provide spectacular views and opportunities for boating and kayaking. There are several fresh-water lakes on the island that also support kayaking and swimming. The entire island is covered by a network of well-marked hiking trails with a wide range of difficulty. The park also has a network of roads that provide easy access to either the coast or inland. More information can be found at: www.mtdesertisland.com and www.acadiamagic.com.

Late June is just before the tourist season. The weather is variable, but generally in the 70’s (21 C). Rain is not uncommon although typically not lasting more than a day.