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Introduction

We have regularly held conferences on lasers and modern instrumentation since 1991. The reports from conferences have been published in the proceedings of SPIE. Authors of these papers have been from many different nations, from both inside and outside Russia. The number of topics discussed at the conferences has increased over time, and it was thus decided that the conference Lasers for Measurements and Information Transfer would be held in 2000. The topics included instability and disturbance in the physics of lasers; frequency control and power radiation of lasers; measurements of the parameters of radiation of lasers; the use of lasers as measurement tools; the formation and transfer of optical information; and the optical technology.

More than 90 presentations were given at the conference, which was held June 5–7, 2007. The authors of these presentations were from many different institutions and universities from places such as Russia, Belarus, Ukraine, China, Germany, and Cameroon. 42 of the papers from this conference are included in this proceedings volume.

The volume is separated into two parts: the first, Lasers and Measurements, contains 15 papers on the laser physics, frequency control of the laser radiation, and the use of lasers as tools of measurement; the second part, Lasers for Information Transfer, contains 27 reports on the formation of optical information, optical technology ,including biological.

We hope this conference will be held again in the future and that the number of participants will increase. The next conference is planned for June 3–5, 2008. Please send proposals to Baltic State Technical University, 190005, St. Petersburg, Russia; telephone faxes (812) 555-76-47; (812) 222-20-65; or e-mail vep29@bstu.spb.su.

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