

Dedicated to the 50th Anniversary of the
Institute for Physical Research

18–21 September 2018

Laser Physics 2018

International Conference, 1st Call

18-21 September, Ashtarak, Armenia

Satellite Event:

International Workshop on

Optical Magnetometry

(German-Armenian OMNIDAV project)

15-16 September, Arzakan, Armenia

LP 2018

ORGANIZED BY
INSTITUTE FOR PHYSICAL RESEARCH,
NAS OF ARMENIA



Dear colleagues!

With great pleasure we invite you to attend the traditional

International Conference Laser Physics 2018

organized by the Institute for Physical Research (IPR) of NAS of Armenia
18–21 September, 2018
in Ashtarak, Armenia.

and the satellite event (restricted participation)

International Workshop on Optical Magnetometry

organized by the Institute for Physical Research (IPR) of NAS of Armenia and
Johannes Gutenberg-Universität - Helmholtz Institute Mainz
15-16 September, 2018
in Arzakan, Armenia

As usual, LP 2018 program will cover all aspects of laser physics with focus on new and exciting developments and results in physics of coherent light sources, nonlinear and quantum optics, matter waves, laser spectroscopy of atoms and condensed matter, laser instrumentation, crystal growth and thin film preparation of inorganic materials for quantum electronics and integral optics, photonics, optical properties of nanostructures and luminescent materials, as well as related fields.

TOPICS OF LP 2018

- Lasers, Laser Optics And Materials
- Nonlinear Optics And Novel Phenomena
- Laser Spectroscopy
- Atomic Physics
- Quantum Optics And Matter Waves
- Quantum Information
- Optical Properties Of Structured Media And Scintillating Materials

TOPICS OF WORKSHOP ON OPTICAL MAGNETOMETRY

- Atomic Vapor-Cell and Remote Magnetometry
- Color-Center Magnetometry
- Mirrorless & Degenerate Lasing

DETAILS

Abstracts of **LP 2018** accepted by the Program Committee will be presented at oral or poster sessions. The duration of invited presentations together with follow-up questions is 40 minutes,

CONFERENCE VENUE

The conference will be held at the Institute for Physical Research in Ashtarak, Armenia. Ashtarak is a small town situated twenty-six kilometers northwest of Yerevan, at the foot of Aragats Mountain and is known for its historical sites, especially for its ancient churches. One of the charms of Ashtarak is the glorious view of the Mount Ararat which you can enjoy right from the windows of the conference hall.

All guests will be transported from their Yerevan hotels to Ashtarak and back every day by the Conference bus. A sightseeing tour is planned for the 3rd day of the Conference.

Yerevan, the capital city of Armenia, is nestled in the shadow of the snow-capped heights of the majestic mount Ararat, where the Biblical Noah's Ark first landed escaping the Great Flood. As you explore the many interesting sights in Yerevan, you will learn about the culture and history of one of the world's oldest nations. You can gain further insights into Armenian cultural achievements at museums, theaters and concert halls.

To visit Armenia is to travel back in history and feel the spirit of more than 30 centuries. Rich with historical churches, monasteries, monuments, and magnificent masonry, this country that was the first to adopt Christianity and proclaim it as its state religion in 301 AD is a unique treasure for those interested in great events. Should your interests lie in nature, the beautiful Armenian Plateau with hidden lakes, including the mysterious Lake Sevan, waterfalls, torrents, rivers, springs, valleys, highlands and rich forests, clearly evidence the miracles of nature. The topography of land and the man-made wonders of centuries old architecture, ruins, churches and monasteries bring to life the history of one of the world's most ancient nation and culture.

a standard oral presentation together with follow-up questions is 25 minutes. The poster dimensions are 80 × 120 cm (A0, portrait). The official language of the Conference is English.

The Conference will commence on Tuesday, September 18, and end on Friday, September 21.

The contributors of LP 2018 are encouraged to consider their participation also at the **International Workshop on Optical Magnetometry** to be held on September 15-16, 2018 in Aghveran, Armenia. Planned are oral and poster sessions.

WORKSHOP VENUE

The workshop will take place in a mountain resort Arzakan, around 45 km away from the capital Yerevan. Organizers will take care of your local transportation and lodging.

The number of participants of the Workshop will be limited to 45.

LP SCIENTIFIC/PROGRAMME COMMITTEE

- David **Sarkisyan** (IPR) — Chairman
- Rafael **Drampyan** (IPR)
- Anahit **Gogyan** (IPR)
- Gayane **Grigoryan** (IPR)
- Ruben **Hovsepyan** (IPR)
- Artur **Ishkhanyan** (IPR)
- Edvard **Kokanyan** (IPR)
- Radik **Kostanyan** (IPR)
- Yuri **Malakyan** (IPR)
- Armen **Melikyan** (Russian-Armenian University)
- Khachatur **Nerkararyan** (Yerevan State University)
- Aram **Papoyan** (IPR)
- Ashot **Petrosyan** (IPR)

WORKSHOP CHAIRPERSONS

- Aram **Papoyan** (IPR) — Co-chairman
- Dmitry **Budker** (JGU Mainz) — Co-chairman

CONFERENCE INTERNATIONAL ADVISORY BOARD

- Charles **Adams** (Durham University, UK)
- Marcis **Auzinsh** (University of Latvia, LV)
- Dmitry **Budker** (JGU Mainz, DE)

- Christophe **Dujardin** (Institut Lumière Matière, FR)
- Michael **Fleischhauer** (Technical University Kaiserslautern, DE)
- Ron **Folman** (Ben-Gurion University of the Negev, IL)
- Wojciech **Gawlik** (Jagiellonian University, PL)
- Yuri **Kivshar** (The Australian National University, AU)
- Claude **Leroy** (Laboratoire Interdisciplinaire Carnot de Bourgogne, FR)
- Goran **Pichler** (University of Kuwait, KU)
- Tigran Vartanyan (ITMO University, RU)

REGISTRATION

We request each author to register and to submit an abstract by filling out the registration form and emailing it to the Secretary at laser.physics.ipr@gmail.com.

The Registration form of the International Conference Laser Physics 2018: [download here](#)

The Registration form of the International Workshop on Optical Magnetometry: [download here](#)

Please, fill in both forms, if you intend to participate at both events.

The acceptance of the abstracts for the presentations is dependent upon the novelty of the work and the clarity of the message it conveys, as well as its relevance to laser physics.

The safe receipt of abstracts will be confirmed by the Conference and Workshop Secretary by e-mail. The acceptance of an abstract for presentation will be acknowledged as soon as the decision by the Program Committee is made.

The registration deadline for both events is **1 July 2018**.

GENERAL INFORMATION

REGISTRATION FEE

The registration fee for **LP 2018** is 100 EUR. It covers the participant set with the abstract book, LP 2018 program, local transportation and coffee breaks. The payment can be made at the registration desk upon your arrival. No fee will be charged for accompanying persons.

Special conditions may apply for student registration fees upon request.

The registration fee for the **International Workshop on Optical Magnetometry** is 100 EUR. It covers the participant set with the program, transportation from Zvartnots airport or Yerevan to Arzakan, accommodation in Arzakan, meals and coffee breaks.

TRAVEL

Armenia's geographical location is very convenient for communication with all the countries in Europe, Middle East, Asia and the CIS. Many international airlines land in Yerevan. You can take direct flights from Athens, Beirut, Doha, Dubai, Istanbul, Kiev, Moscow, Nizhny Novgorod, Paris, Prague, Saint Petersburg, Tbilisi, Tehran, Vienna, Warsaw and other cities, as well as numerous connecting flights through these cities. The international airport Zvartnots is situated 7.2 km

southwest of the capital Yerevan. Please inform the Organizing Committee of your flight number, date and time of arrival by e-mail not later than 7 working days before the arrival, so that we can welcome you at the Yerevan Zvartnots airport carrying an "LP-2018" sign.

VISA

Citizens of the European Union member states, USA, CIS states and Iran do not need entry visas. Citizens of other countries are advised to contact the nearest Armenian Consulate or Embassy to inquire about visa regulations for your country. You should make your visa application well in advance. If needed, the Organizing Committee will be happy to send official letters of invitation to all participants. The Armenian Ministry of Foreign Affairs invites you to apply for a visa online at <http://evisa.mfa.am>. It is also possible to arrive in Yerevan without a visa and buy one at the airport (not for all countries, please contact the Organizing Committee for applicability).

WEATHER

Autumn is the best season in Armenia. In September, the weather is usually great, but can be variable; the average temperature is 20^o–25^oC.

HOTEL ACCOMMODATION

Single and double rooms are available in hotels of various categories, all located in downtown Yerevan, for example:

- [Yerevan Golden Tulip Hotel](#)
- [Tufenkian Historic Yerevan Hotel](#)
- [Ani Plaza Hotel](#)
- [Congress Hotel](#)
- [Aviatrans Hotel](#)
- [Europe Hotel](#)
- [Shirak Hotel](#)
- [Envoy Hostel](#)

Since September is highly touristic season in Armenia, it would be better to make your hotel reservations in advance.

CONTACTS

All correspondence concerning the Conference and the Workshop should be addressed to the Secretaries:

Dr. Hrayr Azizbekyan, Dr. Emil Gazazyan
E-mail: laser.physics.ipr@gmail.com