

# XVIII INTERNATIONAL CONFERENCE

ON

*SYMMETRY METHODS IN PHYSICS*

**Yerevan, Armenia, July 10 - 17, 2022**

## FIRST ANNOUNCEMENT

The XVIII International Conference on **Symmetry Methods in Physics** (SYMPHYS-XVIII), organized by the International Center for Advanced Studies after A.N.Sissakian at Yerevan State University in collaboration with the Laboratory of Theoretical Physics of the Joint Institute for Nuclear Research will be held in Yerevan, Armenia, from 10 to 17 of July, 2022.

### History

The first five Conferences were initiated by Professor Ya.A. Smorodinsky [*Professor Ya.A.Smorodinsky (1917-1992), an outstanding theoretical physicist, had been working at the Kurchatov Center for a long time. Professor Ya.A.Smorodinsky made a significant contribution to the elementary particle physics, nuclear physics, as well as to the investigation of various aspects of symmetries in Physics*], and were organized by the Institute of Physics and Power Engineering in Obninsk from 1986 to 1991.

The next seven Conferences of this series were organized under the patronage of Professor A.N.Sissakian [*Professor A.N.Sissakian (1944-2010) is a famous theoretical physicist who made a substantial and important contribution to high energy physics and to the investigation of various aspects of dynamical symmetries in physics. His whole life was devoted to the Joint Institute for Nuclear Research, where he rose from a junior researcher to Director of the Institute (2006-2010)*] and were held at the Joint Institute for Nuclear Research in Dubna in 1993, 1995 and 1997 and 2009, in Yerevan in 2001, 2003 and 2006 and Prague in 2004. The last three Conferences were held in Zakhgadzor, Armenia in 2010, Yerevan and Dubna in 2011, Dubna in 2014 and Yerevan in 2017.

The purpose of forthcoming SYMPHYS-XVIII Conference, as usual, is to bring together scientists who worked in the modern studies on group theoretical methods in physics and covers fields of research where the symmetry methods play an important role.

The scientific programme of the SYMPHYS-XVIII conference shall be centers around the following **topics**:

- Foundations of quantum mechanics;
- Integrable and superintegrable models;
- Symmetries of differential, difference and nonlinear equations;
- Supersymmetry in Quantum Mechanics and gauge theories;
- Superstrings, Cosmology and Quantum gravity;
- Lie groups, representation theory and special functions;
- Quantum optics, coherent states and Wigner functions;
- Symmetries in Condensed Matter Physics and Statistical Physics.
- Symmetry in particle, molecular, atomic and nuclear physics;

## Scientific Programme

The program of the SYMPHYS-XVIII Conference includes around 10 (40 minutes) plenary talks and the contributions (20 minutes) presented mostly at the afternoon sessions. It is scheduled to have four working days starting on Monday, July 11, at 10 a.m. and ending on Saturday, July 16 at noon. The arrival day is Sunday **July 10** and the departure day is Sunday **July 17**. We are planning to have not more than two parallel sections.

## International Advisory Committee

George Pogosyan (**Chairman**, *Dubna & Yerevan*), Alexander Belavin (*Moscow*),  
 Vladimir Dobrev (*Sofia*),  
 H.-D. Doebner (*Germany*),  
 Jerri Draayer (*Baton Rouge*),  
 Andrzej Gozdz (*Lublin*),  
 Alexey Isaev (*Dubna*),  
 Evgeny Ivanov (*Dubna*),  
 Rostislav Jolos (*Dubna*),  
 Richard Kerner (*Paris*),  
 Dmitri Kazakov (*Dubna*),  
 Andrey Klimov (*Guadalajara*),  
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 Willard Miller (*Minneapolis*),  
 Grigory Trubnikov (*Dubna*),  
 Luc Viniet (*Montreal*),  
 Sergei Vinitsky (*Dubna*),

Viktor Voronov (*Dubna*),  
Bernardo Wolf (*Cuernavaca*)

## International Organizing Committee

Hrach Babujian (*Yerevan*), Anahit Balabekyan (*Yerevan*), Susanna Gaginyan (*Yerevan*), Alexander Gusev (*Dubna*), Ella Karajyan (*Yerevan*), Ol'ga Klimenko (*Dubna*), Elena Kologanova (**Co-Chairperson**, *Dubna*), Sergey Krivonos (*Dubna*), Ruben Manvelyan (*Yerevan*), Levon Mardoyan (**Co-Chairperson**, *Dubna & Yerevan*), Gor Nikoghosyan (*Yerevan*), Ruben Poghossian (*Yerevan*).

## About the town:

Yerevan, the capital of Armenia, is situated in the mountains at the height of 950-1200 metres above the sea-level on the bank of the river Hrazdan. Looming above the Yerevan skyline rises majestic Mount Ararat. Yerevan has many art galleries with extensive collections of classical and modern art, museums, concert halls and theatres, Opera House-all very close to the city centre. Virtually all hotels, museums, government offices, clubs and the like are in the very centre, which can be walked across in 20 minutes - making Yerevan an extremely walkable city. In the summer and fall central Yerevan can feel like one big café and it remains light out until late. The days can be hot, so the nights are perfect for sitting out.

Local time in Armenia is 4 hours ahead of Greenwich Mean Time (GMT + 4). The Armenian national currency is the dram. Average temperatures in the country's capital, Yerevan, range from -5 oC in winter to 30 oC in summer. In July the climate in Yerevan is warm (35 degrees C), dry and sunny.

## Registration Fee

The Registration Fee for participants is **250 EURO**. The Fee covers conference materials, welcome party, conference banquet and coffee breaks and excursion. The Registration Fee for accompanying persons is **150 EURO**, which covers a welcome party, conference banquet, program of accompanying persons and excursion. Payment will be made during the registration. The EURO or USD and ruble equivalent are acceptable.

## Visas

Participants from the following countries have free entrance to Armenia. These are: **USA, EU, Argentina, Brazil, China, Montenegro, Switzerland, Republic of Belarus, Georgia, Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, Russian Federation, Ukraine.**

We would like to inform you that all the participants coming from **Canada, South and Central America, Australia, New Zealand, Iran, Jordan, Japan, Serbia, Cuba**

**and Turkey** can receive a visa for 120 days at the Zvartnots International Airport. It costs 15.000 AMD (approximately 1 Dollar US = 480 AMD). Note that the price of the visa given at the Embassies and Consulates is different.

Participants from all other countries could apply for visas with an invitation only.

## **Transportation**

Yerevan is connected by regular flights from Athens, Berlin, Brussels, Bucharest, Milan, Rome, Paris, Vienna, Warsaw, Kiev, Moscow (15 flights every day from the three Moscow airports: Sheremetevo, Domodedovo and Vnukovo), Istanbul, Tehran, Tbilisi, Beirut, Doha, Dubai and Sharjah. There are also regular flights to many Russian cities: St.Petersburg, Rostov, Saratov, Sochi, Ekaterinburg, Novosibirsk and others. The time table of the international flights to Yerevan can be found at:

”<http://www.zvartnots.am/>”

### **For all information please contact to:**

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