

Symmetry Festival

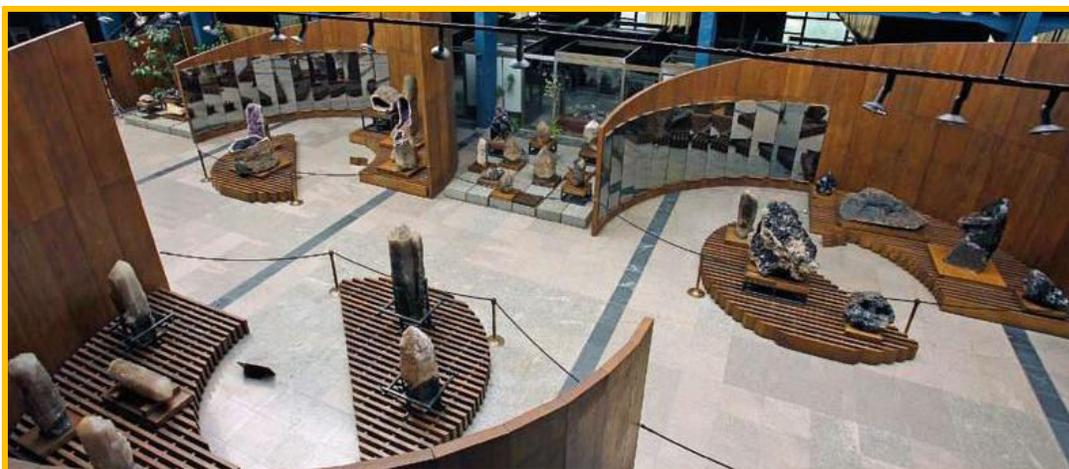
September 2-5, 2020
Sofia, Bulgaria

Symmetry in Nature and Society

The World Largest Multidisciplinary Scientific & Art Festival in Symmetry Studies



Symmetry Festival venue
National Museum "Earth and Man"
Sofia, Bulgaria

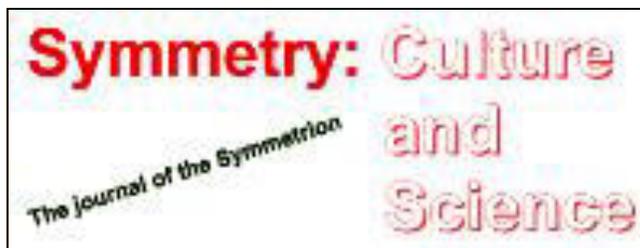
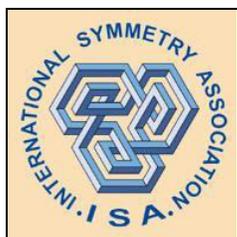


Organized by **SYMMETRION**, under the auspices of the **International Symmetry Association** (www.festival.symmetry.hu).

National organizers: National Museum “Earth and Man”; Bulgarian Mineralogical Society; University of Mining and Geology “St. Ivan Rilski”; Bulgarian Academy of Sciences (*Symmetry Festival* national coordinator: Ruslan I. Kostov, rikostov@yahoo.com).

Symmetry Festival 2020 Sofia (<http://festival.symmetry.hu>). Extended abstracts (4 pages) to be published in the journal of Symmetrion – **Symmetry: Culture and Science** (for submission of abstracts see: <http://journal-scs.symmetry.hu/instructions-for-authors/>; copy to: rikostov@yahoo.com)

Program: International interdisciplinary scientific and art festival – including talks, presentations, workshops, art exhibitions, book shows, concerts, movies, performances and public events.



Planned sessions

- Symmetry and natural history
- Symmetry in physics, chemistry and material science
- Symmetry in mathematics and informatics
- Symmetry in architecture, design and visual arts
- Symmetry in biosciences and medicine
- Symmetry and culture (archaeology; history; mythology; ethnology; fashion; psychology; linguistics; economics)
- Symmetry in music, dance, folklore, literature and other arts
- Symmetry in education and computer applications

Our worldwide symmetry events in the past:

- Symmetry Festival 2016 Vienna; <http://festival.symmetry.hu/archive/symmetry-festival-2016/programs-2016/>
- Symmetry Festival 2013 Delft; <http://festival.symmetry.hu/archive/symmetry-festival-2013/home-2013/organising-committee-and-program-committee-2013/>
- Symmetry Festival 2009 Budapest; <http://festival.symmetry.hu/archive/symmetry-festival-2009/>
- Symmetry Festival 2006 Budapest; <http://festival.symmetry.hu/archive/symmetry-festival-2006/>
- Symmetry Festival 2003 Budapest; <http://festival.symmetry.hu/archive/symmetry-festival-2003/>
- Symmetry Congress 1998 Haifa;
- Symmetry Congress 1995 Washington D.C.;
- Symmetry Congress 1992 Hiroshima;
- Symmetry of Structure Symposium 1989 Budapest.

International Symmetry Association

Executive Board	Honorary Members	Advisory Board	
<p>Gould, Laurence I. (USA); Chair Banney, David (Australia); CEO Bonch-Osmolovskaya, Tatiana (Australia - Russia) Fenyvesi, Kristóf (Finland - Hungary) Petitjean, Michel (France) Sugimoto, Takeshi (Japan)</p> <p><u>Honorary Chief Executive Officer</u> Darvas, György (Hungary)</p>	<p>Kuroda, Reiko (Japan) Lalvani, Haresh (USA) Miyazaki, Koji (Japan) Rosen, Joe (Israel - USA) Shechtman, Dan (Israel; Nobel laureate) 't Hooft, Gerard (Netherlands; Nobel laureate) Weinberg, Steven (USA; Nobel laureate)</p> <p>Honorary President (deceased) Ne'eman, Yuval (Israel) Honorary Members (deceased) Burckhardt, Johann J. (Switzerland) Frolov, Konstantin V. (Russia) Hahn, Theo (Germany) Husimi, Kōji (Japan) Koptsik, Vladimir A. (Russia) Kroto, Harold (UK; Nobel laureate) Marcus, Solomon (Romania) Shinitzky, Meir (Israel)</p>	<p>Petoukhov, Sergey V. (Russia); Chair Aerts, Diederik (Belgium) Avnir, David (Israel) Beke, László (Hungary) Borovkov, Victor (Japan - Estonia) Caglioti, Giuseppe (Italy) Collier, John (Canada - South Africa) Crowe, Donald (USA) D'Ambrosio, Ubiratan (Brasil) Dunham, Doug (USA) Elitzur, Avshalom (Israel) He, Matthew (China - USA) Hofkirchner, Wolfgang (Austria) Kappraff, Jay (USA) Kostov, Ruslan I. (Bulgaria) Mainzer, Klaus (Germany) Marijuán, Pedro C. (Spain)</p>	<p>Molnár, Emil (Hungary) Négadi, Tidjani (Algeria) Olovsson, Ivar (Sweden) Pardavi-Horvath, Martha (USA - Hungary) Pimenta, Emanuel Dimas de Melo (Portugal) Pollack, Gerald (USA) Ruffini, Remo (Italy) Schulte, Egon (USA) Séquin, Carlo (USA) Tennant, Raymond (UAE - USA) Verostko, Roman (USA) Vitiello, Giuseppe (Italy) Wegner, Bernd (Germany) Wismuller, Tom (USA) Zee, Anthony (USA) Zenkin, Konstantin (Russia)</p>

Keynote speakers and session chairs for the Symmetry Festival 2020

Prof. **Matthew He** is Assistant Dean of the Halmos College of Natural Sciences and Oceanography of Nova Southeastern University in Florida. He is an editor of International Journal of Biological Systems, International Journal of Cognitive Informatics and Natural Intelligence, and International Journal of Integrative Biology. He is the book editor of Advances in Bioinformatics and its Applications of World Scientific Publishing. He is a series editor of Biomedical and Life Sciences of Henry Stewart Talk on “Using Bioinformatics in Exploration in Genetic Diversity.” He serves as a member of International Advisory Board of “International Symmetry Association (ISA).



Reiko Kuroda is a professor in Chemistry, Spectroscopy, X-ray Crystallography, Molecular Biology and Developmental Biology. She works in the Institute for Science and Technology Research, Chubu University. She is Professor Emeritus of the University of Tokyo and a member of the Royal Swedish Academy of Sciences.



Victor Borovkov works as a professor of chemistry at South-Central University for Nationalities (China) and a senior research scientist at Tallinn University of Technology (Estonia). He is a member of the editorial boards of several scientific journals, an author of more than 125 publications including research papers, reviews, and books, 10 patents, and serving as an external peer-reviewer of various international journals and scientific foundations. His current research interests include chemistry of porphyrins and related macrocycles, supramolecular chemistry, nanotechnology, chirality science, functional chiral materials, and asymmetric catalysis.



Prof. **Haresh Lalvani** is a sculptor, inventor, architect, designer, morphologist and visual mathematician. He works at the Pratt Institute, New York. He is also affiliated with The Structural Morphology Group, the International Association of Shell and Space Structures, the Japan Institute of Hyperspace Science. He was awarded by the Graham Foundation for Advanced Studies in Fine Arts, the National Endowment for the Arts, and the National Institute for Architectural Education, and worked as an artist-in-residence at the Cathedral of St. John the Divine in New York and as the Co-Director of the Center for Experimental Structures at the School of Architecture, Pratt Institute. He is Honorary Member of the International Symmetry Association.



Prof. **Konstantin Zenkin** is a Russian pianist and theoretic of music. He is a Moscow P. I. Tchaikovsky Conservatory's vice rector for academic studies and an author of a number of books and articles about European music of the 19th-20th centuries, philosophy of music and piano performance art.



Prof. **Chaim Goodman-Strauss** works at the J. William Fulbright College of Arts & Sciences of the University of Arkansas. He is a specialist in convex geometry, especially aperiodic tiling, and with John H. Conway he wrote *"The Symmetries of Things"*, a book surveying the mathematical theory of patterns.



Prof. **Riina Aav** works at Tallinn University of Technology, Estonia. Her scientific interests focus on design of macrocyclic container molecules such as hemicucurbiturils, studies of their formation, structure, chiroptical and supramolecular properties, and their applications. She have worked in the group of Prof. A. Alexakis at the University of Geneva and as a Fulbright visiting scientist with Prof. S. E. Denmark at University of Illinois at Urbana-Champaign. She is teaching organic and analytical chemistry as well as spectroscopy courses.



Prof. **Sergey Petoukhov** works in biophysics and bioinformatics. He is awarded with Soviet Union State prize (1986). He is head of the Laboratory of Biomechanical Systems of the Mechanical Engineering Research Institute of the Russian Academy of Sciences and a leading researcher at the Centre for Interdisciplinary Research in Musical Creativity of the Moscow State Conservatory. He is Chair of the Advisory Committee of the International Symmetry Association.



Exhibition and company promotion

"Family Day" – Friday, September 4, 2020.

Excursion

One day excursion to the Rila Monastery: Saturday, September 5, 2020 (50 EUR).

Festival language

The official festival language will be English.

Cultural Program

- **Welcome Party.** To be held in the museum on September 2, 2020 (free of charge for festival participants).
- **Official Dinner.** To be held on September 3, 2020 (for festival participants who have booked it in their registration; or to be paid at the museum: 50 EUR).
- **Special Exhibitions in the National Museum “Earth and Man”:** “Crystals shine with their symmetry”.

Important deadlines

- **January 1, 2020** Open online festival and field trip registration and submission of abstracts.
- **April 10, 2020** Deadline for abstract submission and early bird registration.
- **September 2-5, 2020** Opening of Symmetry Festival 2020; festival sessions and other events.

Company in charge of registration and hotel accommodation



Congress Management and Events Ltd.

17, Frederic Jolio-Curie Str., bldg. 2, fl. 5, office 9

Sofia 1113, Bulgaria

tel: (+359)29877422, 0896700951; www.cmebg.com

Contact persons: Mira Bonova – mira@cmebg.com;

Denitza Yonkova – denitza@cmebg.com

Important: This is a new **online platform for registration** after 27.02.2020 and the deadline for submission of abstracts and registration is moved to **10 April 2020:**

<https://events.cmebg.com/symmetry-festival-2020/204/>

Registration fees

The festival fee (early bird 300 EUR; late and on site 350 EUR) includes admission to the scientific and art program of the festival, refreshments during the official program, one first-author abstract in the journal of abstracts, welcome reception (September 2, 2020). Accompanying persons are welcome (150 EUR: attendance of festival sessions; welcoming party). The registration fee does not include any insurance for personal injuries sustained, or for loss or damage to property belonging to festival participants (or persons accompanying them). Every attendee must wear her/his official badge to access the sessions. Students (100 EUR) are required to upload a copy of student card or a scan of confirmation of student status from corresponding academic institution. The official dinner on September 3, 2020 is not included in the registration fee (it can be booked for 50 EUR per person during the registration payment process or in Sofia at the museum).

Fees can be refunded after the festival, according to the following policy: cancellations received before April 10, 2020 – 100% refund less 30 EUR for bank and other charges; cancellations received before June 10, 2020 – 50% refund less 30 EUR for bank and other charges; cancellations received after June 10, 2020 – no refund can be made.

Hotel accommodation

CME Ltd. has booked accommodation at preferential rates for festival participants in two hotels in Sofia: Hemus Hotel 3* and Hill Hotel 4*, located in close proximity to the festival venue. Prices are preferential and are only valid for reservations and payments to Congress Management and Events. Rates are per room per night and include: overnight, buffet breakfast and tax. Hotel rates are not subject to VAT.

Hemus Hotel 3*

CLASSIC single room /bed and breakfast basis/ - 40 euro

CLASSIC double room /bed and breakfast/ - 46 euro

Single business suite /bed and breakfast basis/ - 68 euro

Double business suite /bed and breakfast basis/ - 82 euro

Hill Hotel 4*

Single standard room /bed and breakfast/ - 66 euro

Double executive room /bed and breakfast/ - 88 euro

Hotel booking of the above hotels and payment is possible by visiting the following website:

<https://events.cmebg.com/symmetry-festival-2020/204/>

- For different hotels – personal booking is required.

Payments by bank transfer (for Bulgarian participants) will be made to the bank account (any charge for the bank transfer should be paid by the participant):

(Please write) **Symmetry Festival**

Account owner: **University of Mining and Geology “St. Ivan Rilski”, Scientific Research Sector**

Address: Bulgaria, Sofia 1700; Prof. Boyan Kamenov Street 1

Bank: Bulgarian National Bank

Address: Bulgaria, Sofia 1000; Alexander Battenberg Square 1

Bank account number IBAN: BG 07BNBG96613100162501

SWIFT: BNBGBGSF (EUR or other currency)

BIC: BNBGBGSD (for Bulgarians; in Leva)

Please send a copy of the bank transfer to: rikostov@yahoo.com

General information

Presentation type. One or two extended abstracts (each up to 4 pages with references) by a single author and/or first co-author may be submitted as oral and/or poster presentation(s). All oral presentations (30 min. plenary; 15 min. normal) will be made using computers provided by the organizers. For your poster presentations, please print your posters in max. size A0 (ca. 119 x 84 cm; portrait orientation) or smaller. Your abstract(s) will not be published until your registration fee is received. By submitting an abstract, the author(s) attest that the abstract submitted has not been previously published elsewhere and transfers, assigns, or otherwise conveys the copyright for its publication.

Registration (please copy, fill in and send to): office@earthandman.org; rikostov@yahoo.com

SYMMETRY FESTIVAL 2020 REGISTRATION FORM

Surname..... First name(s).....Title.....

Institution.....

Address.....Country.....

E-mail address.....

Phone number..... Fax number.....

I plan an oral or/and a poster presentation entitled:

1.....

.....

2.....

.....

Festival registration fees (in EUR):

Payment	Before April 10, 2020	After April 10, 2020
Registration fee	300	350
Registration fee (with 2 abstracts as first author)	320	370
Student	100	100
Accompanying person	150	150
Official dinner*	50	50
Excursion* – 1 day	50	50
Exhibition area for promotion* – per day for 1 m ²	15	15
Total	xxx	xxx

*Can be paid also at the museum.

Date.....

Visiting Bulgaria

The local currency is the **Bulgarian Lev (1 Lev ~ 0.5 EUR)**. Credit/debit cards (VISA, MasterCard, Maestro) are accepted in hotels, restaurants and larger shops throughout the country. However, you should have some cash when travelling (to buy a metro ticket at the airport station or to take a taxi). Getting some cash from an ATM might be more convenient than using exchange offices. We use a 230-V/50-Hz electricity network (or get a travel adapter). If you need assistance from an ambulance or the police, call 112 from any phone (including your mobile phone while roaming).

Visa. Participants from certain countries must have a Bulgarian visa from a Bulgarian embassy or consulate. In this case one must send his names, birth date and international passport data to the hosting the conference institution and a standard invitation letter can be received. E-mail: office@earthandman.org; rikostov@yahoo.com

Transport

Taxis operate throughout the city (watch the front window for max 1.00 Lev/km in day hours; from Sofia International Airport Terminal 2 to the Symmetry Festival venue it should cost you ~10 Levs or 5 EUR; if you use taxis at the airport, inside the airport turn to the right exit, where there is an official taxi stop). From the Sofia International Airport metro station (turn to the left, follow the blue line and go to the end in the airport hall and then go in front the airport) to the festival venue it should

cost you only 1.60 Lev (=0.8 EUR): ~50-60 minutes travel – you must transfer from the red metro line at the central Serdica Station to the blue metro line for two stops in direction Vitosha, to station *European Union* which is just in front of the National Museum “Earth and Man”. At the airport there is also bus N84 or N284 to downtown (tickets can be bought at the kiosk outside the airport or from the driver; 1.60 Lev). If you arrive at Sofia International Airport Terminal-1 (low cost flights), you can take a bus to Terminal-2 to the metro station (~5 minutes travel), or you can take a bus or a taxi downtown. If you arrive by train or by bus at Sofia Central Railway Station or at the near-by International Bus Station, you can find your way to the metro station and you can travel 4 stops on the blue metro line to the *European Union* station without any transfer (~15 minutes travel; 1.60 Lev).

Sofia Sightseeing and Other Museums: National History Museum; National Institute of Archaeology with Museum; National Museum of History; Boyana Church (UNESCO site); St. Alexander Nevsky Cathedral Crypt Icon Museum; Sofia History Museum; National Museum of Military History; National Polytechnical Museum; National Anthropological Museum; Kvadrat 500 (International and National Art Museum); Museum of Socialist Art; Sofia Arsenal Museum for Contemporary Art; Art Galleries.

Festival venue

The **Symmetry Festival 2020** will take place at the **National Museum “Earth and Man”** in Sofia, Bulgaria. Address: Sofia 1421, Blvd. Cherni Vrah 4. E-mail: earth.and.man@gmail.com; office@earthandman.org; http://www.earthandman.org/?page_id=951&lang=bg

The registration desk at the National Museum “Earth and Man” will be open during the following hours on September 2-4, 2020: 9.00-15.00 h.