

# MG13 STOCKHOLM 1-7 JULY 2019

## THIRTEENTH MARCEL GROSSMANN MEETING

on Recent Developments in Theoretical and Experimental General Relativity, Astrophysics, and Relativistic Field Theories

### LOCAL ORGANIZING COMMITTEE

Andreasson, Hakan P.M.; Bradley, Michael; Brevik, Iver H.; Einasto, Jaan; Hassan, Fawad; Hervik, Sigbjørn; Knutsen, Henning; Marklund, Mattias; Novikov, Igor; Pethick, Christopher; Ringström, Hans; Rosquist, Kjell (**chair**); Rushon, Anthony; Ryde, Felix; Saar, Enn; Ugglå, Claes; Volovik, G.E.

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Blair, David; Choquet-Bruhat, Yvonne; Christodoulou, Demetrios; Damour, Thibault; Everitt, Francis; Fang, Li Zhi; Giacconi, Riccardo; Hänsch, Thomas W.; Hawking, Stephen; Jones, Christine; Kerr, Roy; Kleinert, Hagen; Piran, Tsvi; Ruffini, Remo (**chair**); Sato, Humitaka; Sunyaev, Rashid; Weinberg, Steven.

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- **ESTONIA** Einasto, Jaan; Saar, Enn
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- **GERMANY** Biermann, Peter; Fritsch, Harald; Genzel, Reinhard; Hehl, Friedrich; Kiefer, Claus; Neugebauer, Gernot; Nicolai, Hermann; Renn, Jürgen; Ringwald, Andreas; Ruediger, Albrecht; Schutz, Bernard
- **GREECE** Batakis, Nikolaos A.; Cotsakis, Spiros; Vagenas, Elias C.
- **HUNGARY** Fodor, Gyula
- **ICELAND** Bjornsson, Gunnlaugur
- **INDIA** Chakrabarti, Sandip K.; Iyer, Bala; Padmanabhan, Thanu; Souradeep, Tarun
- **IRAN** Mansouri, Reza; Sobouti, Yousef
- **IRELAND** O'Murchada, Niall
- **ISRAEL** Bekenstein, Jacob
- **ITALY** Belinski, Vladimir; Bianchi, Massimo; Bianco, Carlo Luciano; Della Valle, Massimo; Filippi, Simonetta; Menotti, Pietro; Moschella, Ugo; Stella, Luigi; Treves, Aldo; Xue, She-Sheng
- **JAPAN** Fujimoto, Masa-Katsu; Makino, Jun; Nakamura, Takashi; Sasaki, Misao; Sato, Katsuhiko
- **KAZAKHSTAN** Abdildin, Meirhan M.; Mychelkin, Eduard G.
- **KOREA (PYEONGYANG)** Kim, Jik Su
- **KOREA (SEOUL)** Kim, Sang Pyo; Lee, Hyun Kyu
- **KYRGYZSTAN** Gurovich, Viktor Ts.
- **LIBYA** Gadri, Mohamed
- **MEXICO** Breton, Nora; Garcia-Diaz, Alberto A.; Macías Alvarez, Alfredo; Mielke, Eckehard W.; Quevedo, Hernando; Rosenbaum, Marcos
- **NETHERLAND** 't Hooft, Gerard
- **NEW ZEALAND** Visser, Matt; Wiltshire, David
- **NORWAY** Knutsen, Henning
- **POLAND** Demianski, Marek; Nurowski, Pawel; Sokolowski, Lech
- **PORTUGAL** Costa, Miguel; Silva, Luis O.; Vargas Moniz, Paulo
- **ROMANIA** Visinescu, Mihai
- **RUSSIA** Arkhangelskaja, Irene; Bisnovatyi-Kogan, Gennady; Blinnikov, Serguei; Chechetkin, Valery M.; Cherepaschuk, A.M.; Khriplovich, Iosif; Lipunov, Vladimir M.; Lukash, Vladimir; Rudenko, Valentin N.; Starobinsky, Alexei A.
- **SERBIA** Sijacki, Djordje
- **SLOVENIA** Cadez, Andrej
- **SOUTH AFRICA** Maharaj, Sunil
- **SPAIN** Ibanez, Jesus; Perez Mercader, Juan; Verdaguer, Enric
- **SWEDEN** Abramowicz, Marek A.; Marklund, Mattias; Rosquist, Kjell
- **SWITZERLAND** Durrer, Ruth; Jetzer, Philippe
- **TURKEY** Aliev, Alikram; Gurses, Metin
- **UKRAINE** Zhuk, Alexander
- **UNITED KINGDOM** Cruise, A.M.; Frenk, Carlos S.; Green, Michael; Kibble, Tom; Maartens, Roy
- **USA** Ashtekar, Abhay; Bardeen, J.; Buonanno, Alessandra; Cornish, Neil; Dermer, Charles; DeWitt-Morette, Cecile; Drever, Ronald; Finkelstein, David; Flanagan, Eanna; Hellings, Ronald W.; Jantzen, T. Robert (**chair**); Klauder, John; Kolb, Rocky; Lousto, Carlos; Mashhoon, Bahram; Matzner, Richard; Melia, Fulvio; Nordtvedt, Kenneth; Parker, Leonard; Pretorius, Frans; Pullin, Jorge; Schwarz, John; Shapiro, Irwin; Shoemaker, David; Smoot, George; van Nieuwenhuizen, Peter; Zhang, Bing
- **UZBEKISTAN** Zalaletdinov, Roustam M.
- **VATICAN CITY** Gionti, Gabriele; Stoeger, William
- **VENEZUELA** Barret, Willians; Herrera, Luis
- **VIETNAM** Long, Hoang Ngoc; van Hieu, Nguyen

**MG13** will take place at the Stockholm University. The plenary lectures will be held in the Aula Magna lecture hall and the parallel sessions at the AlbaNova University Center, both easily reachable by public transportation from the city center.

The **MG meetings** were founded in 1975 by Remo Ruffini and Abdus Salam with the aim of reviewing developments in gravitation and general relativity with major emphasis on mathematical foundations and physical predictions. The dedication to Marcel Grossmann celebrates the merging of the mathematical ideas of Ricci and Levi-Civita with the physics world, made possible by the genius of Albert Einstein.

The **main objective** of these meetings is to bring together scientists from diverse backgrounds in order to deepen our understanding of space-time structures and review the status of experiments testing Einstein's theory of gravitation. The range of topics is broad: from more abstract classical gravitational theories, quantum gravity, and string theories all the way to relativistic astrophysics and an outlook towards future observational missions.

The **first two meetings** were held in Trieste, Italy, MG3 in Shanghai, China, MG4 in Rome, Italy, MG5 in Perth, Australia, MG6 in Kyoto, Japan, MG7 in Stanford, USA, MG8 in Jerusalem, Israel, MG9 in Rome, Italy, MG10 in Rio, Brazil, MG11 in Berlin, Germany and MG12 in Paris, France.

**Interested participants** may inquire directly by email to the conference email account or contact members of any of the three organizing committees:

International Organizing Committee;  
International Coordinating Committee;  
Local Organizing Committee.  
**website:**  
<http://www.icra.it/MG/mg13>  
**email:** mg13@icra.it

