## LAUDATIO

## in Honour of Professor Siegfried Grossmann of the University of Marburg, Germany

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## Professor Dr. Marko Robnik, Director of CAMTP

Ladies and Gentlemen, Your Excellency, respected Rector Professor Igor Tičar, respected Professor Ludvik Toplak, Member of the Senate of the European Academy of Sciences and Arts, and President of the Alma Mater Europaea, Evropski Center Maribor, respected distinguished guests!

Professor Siegfried Grossmann from the University of Marburg, Germany, is one of the greatest theoretical physicists of the 20th and 21st centuries, in the worldwide context. He is Honorary Doctor (Doctor honoris causa, 2011) of the University of Maribor and has the credits for the development of CAMTP and its international relationships. Professor Grossmann, born on 28 February 1930 in Königsberg, East Prussia (now Kaliningrad, Russia), is working at the University of Marburg since 1964, where he was retired in 1998

He is one of the founders of the nonlinear dynamics as the new scientific discipline, and also is one of the world-wide leading theoreticians in the fields of fluid dynamics and theory of turbulence, stochastic processes, phase transitions, laser physics, nuclear physics, transport theory, Bose-Einstein condensation and the general statistical physics, as well as mathematical physics and functional analysis. We should mention that Universities of Marburg and Maribor are partner universities, and Marburg and Maribor are twin cities. Therefore, Professor Grossmann has contributed a lot to the enrichment of the cultural and scientific exchange between the two cities and their universities.

His scientific life opus in the numerous research fields of theoretical physics is immense and deserves the highest international recognition. Indeed, Professor Grossmann has received many high ranking awards and honours. Among them I should mention only a few most important ones:

- In 1991 he was elected full member of the European Academy of Sciences and Arts
- In 1994 he was elected full member of the Berlin-Branderburgische Akademie der Wissenschaften, where since then he also holds important functions

- In 1994 he was elected full member of the Deutsche Akademie der Naturforscher Leopoldina
- In 1995 he was awarded the Max-Planck-Medal of the German Physical Society, the highest award for physics
- $\bullet$  In 1996 he was awarded the Grosses Verdienstkreuz des Verdienstordens der Bundesrepublik Deutschland
- In 2006 he received the Honorary Doctorate of the University of Duisburg-Essen
- In 2011 he received the Honorary Doctorate of our University of Maribor
- In 1995-2002 he was a member of the Senate of the Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren (HGF)
- In 1998-2000 he was the President of the Senate Committee for the strategy fond of the Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren (HGF)
- In 1990-1992 he was President of the committee for fundamental research of the Federal Ministry for Research and Technology of the German Government
- Furthermore, he was the president or a member of numerous other committees and bodies, such as: Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren, Federal ministries of the German Government, German Research Society, Committee for nominations of the Leibniz Award, Minerva Center for Nonlinear Dynamics of Complex Physical Systems, "Network Nonlinear Dynamics" of the European Science Foundation, the scientific council of the German Electron Synchrotron (DESY) in Hamburg, Ombudsman of the German Research Society.
- Last but not least, in 2005 he was awarded the Seal of the City of Maribor by the mayor of our city of Maribor, Mr. Boris Sovič.

Professor Grossmann is not only a leading scientist and important adviser and authority in the domain of natural and other sciences, but also an excellent educator. He has educated a great number of excellent theoretical physicists, as doctoral students, as postdoctoral coworkers, and as his assistants. Most of them became well known outstanding researchers and professors all over the world. As examples I should mention Professor Peter Richter of the University of Bremen, who was one of the first, unfortunately he passed

away last May, then Professor Bruno Eckhardt, who is now full professor at the University of Marburg, and was a recipient of the Leibniz Award, which is the highest national award for science in Germany, and Professor Detlef Lohse of the University of Twente in Enschede, The Netherlands, who also is a recipient of the Spinoza Award, the highest award for science in The Netherlands.

Regarding his work connected with the University of Maribor, I would like to mention the following.

Professor Grossmann is one of the five Honorary Directors of our world-top international Summer Schools and Conferences "Let's Face Chaos through Nonlinear Dynamics", taking place every three years at the University of Maribor, under the organization of CAMTP, namely along with other leaders in the field, Professors: Giulio Casati, Como, Italy, Predrag Cvitanović, Atlanta, USA, Theo Geisel, Göttingen, Germany, and Hermann Haken, Stuttgart, Germany. He is also a major invited lecturer since 1994. He has also kindly contributed a paper to all of our conference proceedings so far. In 2005 the gathering was dedicated to his 75th birthday, and in 2010 the 9th Christmas Symposium was dedicated to his 80th birthday. His support of - and collaboration with - CAMTP, the Center for Applied Mathematics and Theoretical Physics of the University of Maribor, was very important and highly appreciated since 1994.

Professor Grossmann has initiated a most successful scientific cooperation between my group at CAMTP with the group of Professor Hans-Jürgen Stöckmann at the University of Marburg, in the field of quantum chaos, which started in 1996, when I was visiting there, based on a kind invitation by Professor Grossmann. Since then the cooperation between CAMTP and University of Marburg has developed very strongly. Three PhD students of mine were involved in this cooperation, and many coworkers on the German side. We have numerous joint original scientific publications with the group of Professor Stöckmann, who is also with us at this meeting, and on this occasion I thank him sincerely as well for the great scientific cooperation over the past two decades. Also, we have three joint papers with Professor Grossmann.

But there are also other activities, organized jointly with the University of Marburg, namely with Professor Stöckmann, and always kindly and strongly supported by Professor Grossmann. The so-called SOCRATES workshops on classical and quantum chaos, which took place twice in Marburg (namely 2004 and 2008), and twice in Maribor (in 2004 and 2009). In addition, there

are the Christmas Symposia of Physicists of the University of Maribor, the present one is already the 14th in the series, where Professor Grossmann has attended several times, and, moreover, we have almost every year several other participants, invited speakers, distinguished guests from the University of Marburg, especially Professor Hans-Jürgen Stöckmann. The colleagues from Marburg very often participate also at the Japan-Slovenia Seminars on Nonlinear Science as invited external honorary guests and speakers, which have a long tradition, since 1999, and we had so far 14 of them, both in Slovenia and in Japan. Also, Professor Grossmann has kindly accepted our invitation to be a member of the international board of directors of the European Advanced Studies Conferences, which we have initiated with Professor Andreas Ruffing from the Technical University of Munich, and Professor Tassos Bountis from the University of Patras, Greece, who is also with us at this meeting. I sincerely thank him as well, for the excellent cooperation over more than twenty years.

Finally, I should mention that Professor Siegfried Grossmann at his high age of 85 is still scientifically active, publishing important research papers every year, and also giving lectures at conferences and seminars.

Therefore, I may conclude, that scientific work and academic support by Professor Grossmann for the CAMTP - Center for Applied Mathematics and Theoretical Physics and for the Faculty of Natural Sciences and Mathematics of the University of Maribor, is invaluable, and that Professor Grossmann is an eminent Ambassador of Science of the University of Maribor.

At the end, I wish to quote the words of Professor Peter Richter and Professor Detlef Lohse, both his former PhD students, and also eminent scientists by themselves, saying the following:

"Thinking of Siegfried, the planets and stars remind us of Immanuel Kant with whom he shares not only the birthplace (Königsberg, East Prussia, now Kaliningrad, Russia), but also many standards and virtues: as teacher, thinker, and as a man of wisdom and influence."

Unfortunately, this time he is not able to attend our meeting due to some health problems.

Therefore, we, all the participants of our gathering, send to him our message:

Happy birthday, and thank you, Siegfried, for all that you have done for all of us: Alles Gute für Dich und vielen herzlichen Dank!