

Serbian Academy of Sciences and Arts
Mathematical Institute SANU
Journal *Regular and Chaotic Dynamics*

Steklov Mathematical Institute RAS
Institute of Computer Science
(Moscow–Izhevsk)

II INTERNATIONAL CONFERENCE
**GEOMETRY, DYNAMICS,
INTEGRABLE SYSTEMS 2010**

PROGRAMME

Г Д
И С

7–13 September 2010
Belgrade, Serbia

Special announcement

The Scientific Committee of the Second International Conference GDIS 2010 is pleased to announce a decision to mark 60th anniversary of four distinguished scientists Boris Dubrovin, Valery Kozlov, Igor Krichever, and Anatoly Neishtadt within the Conference and to organize special sessions dedicated to each of them.

On behalf of the Scientific Committee
S. Novikov, V. Dragović, A. Borisov

Boris Dubrovin



Boris Dubrovin has been acclaimed for his research in the theory of integrable dynamical systems in Geometry and Mathematical Physics. His fundamental contributions include the development of the theory of Frobenius manifolds (Gromov – Witten invariants, singularity theory, reflection groups and their generalizations), normal forms of integrable PDEs, Hamiltonian perturbations of hyperbolic systems, geometry of isomonodromy deformations, theta-functions of Riemann surfaces and nonlinear waves, etc. He was awarded the Prize of Moscow Mathematical Society, 1976 (jointly with A. Its and I. Krichever). He delivered plenary lectures at numerous congresses and conferences including: International Congress of Mathematical Physicists, Swansea, 1988, and European Congress of Mathematicians, Budapest, 1996, International Congress of Mathematicians, Berlin, 1998, International Congress of Mathematical Physicists, Rio de Janeiro, 2006.

Boris Dubrovin coauthored several books, among them the world famous *Modern Geometry* (with S. P. Novikov and A. T. Fomenko). Mathematics Genealogy Project records his 14 PhD students among them V. Varichagin, A. Zhivkov, V. Dragović, T. Grava, M. Mazzocco, M. Bertola and others. He has been a principal coordinator of several major European research and training networks including, ESF Research Network MISGAM, Marie Curie RTN ENIGMA, European Research Council Advanced Grant FroM-PDE, and others. Boris Dubrovin is a full professor at SISSA (International School for Advanced Studies) in Trieste serving there for a long time as the Head of the Mathematical Physics Sector.

Valery Kozlov



Vice-President of Russian Academy of Science. Director of the Steklov Mathematical Institute of Russian Academy of Sciences. Honors and awards for his outstanding contributions in science include: M. V. Lomonosov 1st Degree Prize (the major prize awarded by M. V. Lomonosov Moscow State University), S. A. Chaplygin prize of the Russian Academy of Sciences, State Prize of the Russian Federation, Peter The First Golden Medal of the International Academy of Environmental and Human Society Sciences, The Breast Badge "For Distinguished Services" of the Russian Academy of Natural Sciences, Order of Honor, S. V. Kovalevskaya prize of the Russian Academy of Sciences, Order of Service to the Fatherland IV class, L. Euler Gold Medal of the Russian Academy of Sciences. V. V. Kozlov was in 2009 awarded the Gilli–Agostinelli International Prize of the Turin Academy of Sciences for "the best works of the decade on theoretical mechanics and classical mathematical physics". Valery Kozlov has had more than 30 PhD students, to mention S. Bolotin, A. Borisov, Yu. Fedorov, D. Treschev. Even a modest description of the work of Valery Vasilievich Kozlov would require pages, http://ics.org.ru/person?menu=mi_person&persid=38. Instead, here is an excerpt from the official statement of the committee awarding V. V. Kozlov the Gilli–Agostinelli prize of the Turin Academy:

"Valery Vasilievich Kozlov ranks among the world's most outstanding authorities on theoretical mechanics; his contribution to this discipline has had an appreciable influence on its recent development. His interests lie in the most diverse fields. It is notable that he manages to obtain a variety of considerable, often final results in each of them. His interests range over rigid body dynamics, the integrability of dynamical equations and stability theory, from variational methods and various fields of analytical mechanics to impact theory and the theory of integral invariants, statistical mechanics and various fields of mathematical physics".

Igor Krichever



Igor Krichever is renowned for his highly influential, pioneering works on applications of algebraic geometry to the theory of classical and quantum integrable systems and the spectral theory of periodic operators, but also for the applications of the integrable systems to the fundamental problems of algebraic geometry (Riemann-Schottky type problems, the Novikov conjecture...). Currently he occupies a position of a leading researcher at the Landau Institute for Theoretical Physics of the Russian Academy of Science and Chair of the Department of Mathematics at Columbia University, New York. He obtained his PhD from Moscow State University in 1975 and his Doctor of Science Degree in 1983. He was a recipient (together with B. Dubrovin and A. Its) of the Prize of Moscow Mathematical Society in 1976. He was a plenary speaker on many important occasions including XIV International Congress on Mathematical Physics, Lisbon, 2003. Among his publications are over 120 research papers and the books: *Topological and Algebraic Geometry Methods in Contemporary Mathematical Physics*. (with B. Dubrovin and S. Novikov), Cambridge Sci. Publishers, 2004, 139 pp., and *Perturbation Theory in Periodic Problems for Two-Dimensional Integrable Systems* (Soviet Scientific Reviews, Section C). He is a member of the Council of the Moscow Mathematical Society and a member of the Executive Committee of the European Mathematical Society.

Anatoly Neishtadt



Anatoly Neishtadt is a world renowned expert in many areas of applied mathematics including dynamical systems, perturbation theory, adiabatic invariants, bifurcation theory, celestial mechanics, theory of motion of charged particles, and hydrodynamics.

He was a recipient of Lyapunov Prize of Russian Academy of Sciences for the year 2001 (jointly with D. V. Anosov) and many other prizes and honors including addresses at the International Congress of Mathematicians (Kyoto, 1990), International Congress on Theoretical and Applied Mechanics (Warsaw, 2004).

He is the author of numerous, highly influential research papers in his field of expertise and the monograph (jointly with V. I. Arnold, V. V. Kozlov) "Mathematical Aspects of Classical and Celestial Mechanics", Encyclopaedia of Mathematical Sciences, vol.3, Dynamical Systems-3, Springer-Verlag, 1988, 1998, 2006.

Anatoly Neishtadt's overall influence on the development of applied sciences worldwide, and in Russia in particular, cannot be overestimated. As one of the leading researchers he served at: All-Union Institute of Medical Engineering, Moscow, Space Research Institute of USSR Academy of Sciences, Moscow, as the Head of the Laboratory of Nonlinear and Chaotic Dynamics at Space Research Institute of Russian Academy of Sciences (RAS), Moscow, Institute of Natural Sciences and Ecology of Russian Scientific Centre "Kurchatov Institute" (since 2006 Department of Nanotechnology and Informatics, Moscow Institute of Physics and Technology), Professor of Moscow State University, Department of Mathematics and Mechanics, Professor of Applied Mathematics, Department of Mathematical Sciences, Loughborough University (UK).

Tuesday, September 7

08:00 **Transfer from the hotel to the Serbian
Academy of Sciences and Arts**

10:00 – 11:00 **Opening ceremony
and concert of Divna Ljubojević**

Opening Session

11:00 – 11:35 **Sergey Novikov:**
SINGULAR SOLITONS AND INDEFINITE METRIC

11:45 – 12:20 **Valery Kozlov:**
KINETIC EQUATIONS, DYNAMICS OF
CONTINUOUS MEDIUM AND TURBULENCE

12:30 – 13:15 **Concert – Bora Dugić**

13:30 – 14:30 **Welcome reception**

Afternoon Session

15:00 – 15:35 **Boris Dubrovin:**
HAMILTONIAN PDEs AND THEIR SOLUTIONS

15:40 – 16:15 **Igor Krichever:**
INTEGRABLE SYSTEMS AND
GEOMETRY OF PLANE CURVES

16:15 – 16:45 **Break**

16:45 – 17:20 **Anatoly Neishtadt:**
CAPTURE INTO RESONANCE AND SCATTERING
AT RESONANCES IN DYNAMICS
OF CHARGED PARTICLES

17:25 – 18:00 **Velimir Jurdjević:**
OPTIMAL CONTROL PROBLEMS ON LIE GROUPS
AND INTEGRABLE HAMILTONIAN SYSTEMS

19:00 **Transfer to the hotel**

Wednesday, September 8

Session dedicated to Valery Kozlov

- 09:00 – 09:35 **Dmitry Treschev:**
SEPARATRIX MAP AND HAMILTONIAN DYNAMICS
- 09:40 – 10:15 **Emma Previato:**
STRATIFICATION OF JACOBIANS AND
PDEs FOR THETA FUNCTIONS
- 10:20 – 10:55 **Yuri Fedorov:**
THE STEKLOV-LYAPUNOV SYSTEMS AND THEIR
GYROSCOPIC GENERALIZATIONS: A GEOMETRIC
AND ALGEBRAIC GEOMETRIC BACKGROUND
- 10:55 – 11:25 **Coffee break**
- 11:25 – 12:00 **Lev Lerman:**
TOPOLOGY OF 3 D.O.F. INTEGRABLE
HAMILTONIAN SYSTEMS IN A SATURATED
NEIGHBORHOODS OF SIMPLE SINGULAR POINTS
- 12:05 – 12:40 **Alexey Borisov, Ivan Mamaev:**
TOPOLOGY AND STABILITY
OF INTEGRABLE SYSTEMS

Session dedicated to Anatoly Neishtadt

- 15:00 – 15:35 **Tudor Ratiu:**
POISSON AND VARIATIONAL STRUCTURE
OF COMPLEX DYNAMICAL SYSTEMS
- 15:40 – 16:15 **Alexander Veselov:**
GAUDIN SUBALGEBRAS AND MODULI SPACES
OF STABLE RATIONAL CURVES
- 16:15 – 16:45 **Coffee break**
- 16:45 – 17:20 **Alain Albouy:**
FINITENESS OF THE NUMBER OF CENTRAL
CONFIGURATIONS IN THE 5 BODY PROBLEM
- 17:25 – 18:00 **Teodor Atanacković:**
MECHANICS WITH NONINTEGER DERIVATIVES:
GENERALIZED HAMILTON'S PRINCIPLE
- 18:05 – 18:40 **Zoran Knežević:**
COMPUTATION OF THE QUASI-INTEGRALS
OF ASTEROID EQUATIONS OF MOTION
- 20:00 **Social dinner at the hotel**

Thursday, September 9

Session dedicated to Boris Dubrovin

- 09:00 – 09:35 **Sergio Benenti:**
TBA
- 09:40 – 10:15 **Emil Horozov:**
BISPECTRAL DARBOUX TRANSFORMATIONS
AND REPRESENTATIONS OF W-ALGEBRAS
- 10:20 – 10:55 **Gregorio Falqui:**
CLASHING OF POLES IN GAUDIN MODELS:
CLASSICAL AND QUANTUM CASES
- 10:55 – 11:25 **Coffee break**
- 11:25 – 12:00 **Angel Zhivkov:**
LONG-TIME STABILITY OF THE SOLAR SYSTEM
- 12:05 – 12:40 **Vladimir Dragović:**
INSPIRED BY THE WORK OF DUBROVIN,
KOZLOV, KRICHEVER, AND NEISHTADT

Session dedicated to Igor Krichever

- 15:00 – 15:35 **Victor Buchstaber:**
ELLIPTIC FUNCTIONS AND
INTEGER HIRZEBRUCK GENERA
- 15:40 – 16:15 **Petr Kulish:**
QUANTUM INTEGRABLE SPIN SYSTEMS
AND GENERALIZED SCHUR-WEYL DUALITY
- 16:15 – 16:45 **Coffee break**
- 16:45 – 17:20 **Anton Zorich:**
SQUARE-TILED CYCLIC COVERS
- 17:25 – 18:00 **Armen Sergeev:**
HARMONIC SPHERES CONJECTURE
- 18:05 – 18:40 **Iskander Taimanov:**
SINGULAR SPECTRAL CURVES
IN THE FINITE GAP INTEGRATION
- 20:30 **Concert – Teofilović twins**

Friday, September 10

Morning Session

- 09:00 – 09:35 **Ana Bela Cruzeiro:**
STOCHASTIC LAGRANGIANS NAVIER-STOKES
FLOWS ON RIEMANNIAN MANIFOLDS
- 09:40 – 10:15 **Anatol Odziejewicz:**
INTEGRABLE HAMILTONIAN SYSTEMS
RELATED TO THE HILBERT-SCHMIDT IDEAL
- 10:20 – 10:55 **Sergei Tabachnikov:**
GEOMETRY, ALGEBRA, AND DYNAMICS
OF THE PENTAGRAM MAP
- 10:55 – 11:25 **Coffee break**
- 11:25 – 12:00 **Rade Živaljević:**
DISCRETE AND CONTINUOUS COMPLEXES
AND POSETS IN TOPOLOGICAL COMBINATORICS
- 12:05 – 12:40 **Svjetlana Terzić**
TORIC GENERA OF SOME HOMOGENEOUS SPACES
AND THEIR FIBRATIONS

15:00 **Excursion to Sremski Karlovci**

19:30 **Conference dinner at Fishermen Island**

SREMSKI KARLOVCI

Sremski Karlovci is a town located at the northeast of Srem, on the slopes of the Fruška Gora and on the bank of Danube. It is 10 km away from Novi Sad and 57 km away from Belgrade. A town of culture, with the Serbian orthodox church and one of the first Serbian lyceums, and the town where the Treaty of Karlowitz, modifying the frontiers of the region, had been signed. Since the Middle Ages, the area around Sremski Karlovci has the reputation of producing good white wines.

History

In ancient times, a small Roman fortress existed at this location. The town was first mentioned in historical documents in 1308 with the name Karom. The fortress of Karom was built on the ruins of the ancient Roman one. Until 1521, when it was conquered by the Ottoman Empire, the Karom was in possession of the Hungarian noble families. The Slavic name for the town - Karlovci, was first recorded in 1532/33. Between November 16, 1698, and January 26, 1699, the town of Karlovci was the site of a congress that ended the hostilities between the Ottoman Empire and the Holy League, a coalition of various European powers including the Habsburg Monarchy, Poland, Venice, and Russia; the congress produced the Treaty of Karlowitz. It was the first time a round table was used in



international politics. After this peace treaty, the town was a part of the Habsburg Monarchy and was included into the Military Frontier. It was also the spiritual, political, and cultural center of the Serbs in the Habsburg Monarchy. The Metropolitan of the Serb Orthodox Church resided in the town. The town also

featured the earliest Serb grammar school founded on August 3, 1791. Three years after this, an Orthodox seminary was also founded in the town: it was the second oldest Orthodox seminary in

the world (after the Spiritual Academy in Kiev), and it is still in existence. At the Serb National Assembly in Karlovci in May 1848, the unification of the regions of Srem, Banat, Bačka, and Baranja into the province of Serbian Vojvodina was declared. The first capital of Serbian Vojvodina was in Karlovci. When Serbian Vojvodina was in 1849 transformed into the new province named Vojvodina of Serbia and Tamiš Banat, Karlovci was not included into this province, but was returned under the administration of the Military Frontier. In 1918, the town became part of the Kingdom of Serbs, Croats and Slovenes. In the 1920s, it became the headquarters of Russian White émigrés of General Wrangel whose monument remains to this day. It was also an early home to the Holy Synod of the Russian Orthodox Church Outside Russia.

Tourist sites

The Archbishop Residence - it was erected in 1894 at the initiative of a Serbian patriarch Georgije Branković and according to plans by architect Vladimir Nikolić. The palace has many icons, portraits of Serbian church dignitaries, old books, and objects from past centuries.

The St. Nicolas Church - In 1758, the present church was constructed by the Metropolitan Pavle Nenadović in the place of a little church dedicated to St. Nicholas. On the side walls a famous Serbian painter Paja Jovanović had presented, on the right, the return of Serbs in front of the Mayoralty of Karlovci in 1814, and on the left, a



very nice "St. George killing the Dragon" and the Crowning of the king Stefan by his brother St. Sava. This church guards two important relics, the miraculous icon of the Holy Mother with infant Christ work of an unknown Russian author from the 14th century and the holy reliquary with remains of St. Arsenije Sremac, the second Serbian archbishop and disciple of St. Sava, the biggest Serbian enlightener. The magnificent iconostasis is a work of Jakov Orfelin and Teodor Racun.

Karlovačka grammar school - the first Serbian high school founded in 1791 by the Metropolitan Stefan Stratimirović and a merchant Dimitrije Anastasijević. The high school is a true monument to Serbian education and encloses a modern library of 18.000 precious volumes. **Seminary** - founded in 1794 by already mentioned Stefan Stratimirović. It has worked as a college since 1914. Nowadays it is a boarding school.

The fountain of the four lions – a symbol of Karlovci, it was made according to the project by Italian architect Giuseppe Aprili, honoring the end of the construction of the first town plumbing. There is a legend saying that a person who drinks the water from the fountain will return to Karlovci to get married.

Catholic church of "Holy Trinity" - erected in the 18th century, and well-known for its beautiful gates and engravings.



The Chapel of Peace - erected in 1817 in the place of a Turkish camp, as a symbol of the world-known Treaty of Karlowitz. The tomb of a Venetian diplomat died in Karlovci during the peace negotiations is located here.

The house of a famous Serbian poet Branko Radičević – Branko Radičević lived in this house for 6 years, while being a student of the Karlovačka grammar school. He wrote his first poems here.

Saturday, September 11

09:00 – 13:00 **Excursion to monasteries of Fruška Gora**

FRUŠKA GORA

Fruška Gora is located in the north of Srem, Serbia, and it is sometimes also called the Jewel of Serbia for its beautiful landscapes, nature, and countryside. The literal translation of "Fruška Gora" would be "the Frankish Mountain". It received this name due to its function as a natural border during Frankish campaigns. During the time of the Roman Empire, its name was Alma Mons ("Fertile Mount"). In 1960, Fruška Gora was proclaimed a National Park. It is an isolated, narrow, island mountain in the Pannonia plain, 80km long and only 15km wide. The highest peak of the mountain is 539m high Crveni Čot. The location of Fruška Gora, specific geological history, and different micro-climatic conditions make it very interesting and important to science. Thanks to the unique and very rich deposits of fossil fauna and flora, Fruška Gora is called the 'mirror of geological past'. The main characteristic of this region is the existence of numerous protected, rare, and endangered species. Fruška Gora hides 17 orthodox monasteries famous for their specific architecture, treasures, libraries, and frescoes, as well as numerous archaeological sites.

History

Once upon a time Fruška Gora mountain was an island in the huge Pannonian Sea which covered the area of what is nowadays called the Pannonian plain. Even during the Roman Empire Fruška Gora was inhabited. Probably the most famous testimony from this period is Vrdnik tower, which was, according to some sources, built by the Roman Emperor Probus in the third century. In the beginning of 15th century, fleeing from the Turks, Serbs inhabited this mountain, and founded numerous monasteries to which they brought relics from churches in Central Serbia. Around 30 monasteries existed, 17 of them are active today and the others are in different stages of dilapidation.

Monasteries

According to historical data, these monastic communities were historically recorded since the first decades of the 16th century. Legends, however, place their founding to the period between the 12th and 15th centuries. The monasteries are concentrated in an area 50 kilometers long, and 10 kilometers wide. In the



course of centuries of their existence, these monasteries sustained the spiritual and political life of the Serbian nation. Fruška Gora Monasteries was declared Monuments of Culture of Exceptional Importance in 1990. The most prominent monasteries are:

Bešenovo - According to the legend, this monastery was founded by a Serbian king Dragutin at the end of the 13th century. The earliest historical records about the monastery date from 1545.

Velika Remeta - Traditionally, its founding is linked to King Dragutin. The earliest historical records about the monastery date to 1562.



Grgeteg - According to legends, the monastery was founded by Zmaj Ognjeni Vuk (Despot Vuk Grgurević) in 1471. The earliest historical records about the monastery date to 1545/1546.

Krušedol - The monastery was founded between 1509 and 1516, by Bishop Maksim (Despot Đorđe Branković) and his mother Angelina.

Mala Remeta - The foundation is traditionally ascribed to the Serbian King Dragutin. The earliest historical records relating to the monastery are dated to the middle

of the 16th century.

Novo Hopovo - According to tradition, the monastery was built by the Despots of the House of Branković. The first reliable mention of the monastery is dated to 1641.

Staro Hopovo - According to the tradition, the monastery was founded by Bishop Maksim (Despot Đorđe Branković). The first reliable mention of the monastery dates back to 1545/1546.



WINES

Grape cultivation in Serbia has had a long tradition which dates back to the Roman period. Traditional ways are used in production of high quality white, rose and red wine, which has been served at royal courts, at hotels and restaurants in Europe and the world.

Sremski Karlovci, a town on the slopes of Fruška Gora, has been the reputable Serbian wine capital for several centuries. There is an authentic wine from this area that has a particular sweet-sour taste, and ruby or sometimes white color, and is called "**bermet**". The legend has it that during the reign of Austria-Hungary Empire, there was a river port in Karlovci from which the wine was transported to Vienna. Maria Theresa tasted the wine and asked about its origin. When she was told that it was produced in the region from which males were constantly recruited and sent to war, the Empress granted the men from Fruška gora amnesty so that they could continue the wine production. The production of "bermet" is a slow and expensive process. There is no other place in the world where this wine is produced. "Bermet", a "noble wine with herbs", is among rare wines that are drunk both as an aperitif and with desserts. Its complex scent and taste are immediately recognized by the distinctive taste of fruit – dried figs, orange rind, anise, carob, nutmeg, clove, vanilla, and wormwood.

Afternoon Session

15:40 – 16:15 **Alexander Kilin:**
SUPERINTEGRABLE SYSTEMS ON A SPHERE

16:15 – 16:45 **Coffee break**

16:45 – 17:20 **Božidar Jovanović:**
ROLLING SPHERES IN \mathbb{R}^n

17:25 – 18:00 **Milena Radnović:**
ON ELLIPSOIDAL BILLIARDS
IN PSEUDO-EUCLIDEAN SPACE

18:05 – 18:40 **Borislav Gajić:**
SYSTEMS OF HESS-APPEL'ROT TYPE

Poster Session

18:45 – 20:00 **Poster presentations**

Sunday, September 12

Morning Session

- 09:00 – 09:35 **Alexey Bolsinov**
BI-HAMILTONIAN STRUCTURES AND
SINGULARITIES OF INTEGRABLE SYSTEMS
- 09:40 – 10:15 **Boris Konopelchenko:**
ALGEBRAIC CURVES IN BIRKHOFF STRATA
OF SATO GRASSMANNIAN AND
HYDRODYNAMICAL TYPE SYSTEMS
- 10:20 – 10:55 **Yuri Suris:**
ON THE LAGRANGIAN STRUCTURE
OF INTEGRABLE QUAD-EQUATIONS
- 10:55 – 11:25 **Coffee break**
- 11:25 – 12:00 **Michael Monastyrsky:**
HECKE SURFACES AND
DUALITY TRANSFORMATIONS
IN NON-ABELIAN SPIN SYSTEMS
- 12:05 – 12:40 **Nenad Manojlović:**
JORDANIAN DEFORMATION
OF THE OPEN XXX-SPIN CHAIN

Afternoon Session

- 15:00 – 15:35 **Dmitry Korotkin:**
TAU-FUNCTIONS AND MODULI OF DIFFERENTIALS
- 15:40 – 16:15 **Vladimir Janković:**
GENERALIZED NEWTON AERODYNAMIC PROBLEM
- 16:15 – 16:45 **Coffee break**
- 16:45 – 17:20 **Maria Przybylska:**
NECESSARY CONDITIONS OF PARTIAL
INTEGRABILITY FOR HAMILTONIAN SYSTEMS
WITH HOMOGENEOUS POTENTIAL. APPLICATIONS
TO THE THREE BODY PROBLEM
- 17:25 – 18:00 **Oleg Sheinman:**
LAX OPERATORS ALGEBRAS
AND INTEGRABLE SYSTEMS
- 18:05 – 18:40 **Hans Lundmark:**
PEAKON EQUATIONS
RELATED TO THE CUBIC STRING

Monday, September 13

Morning Session

- 09:00 – 09:35 **Oleg Mokhov:**
COMPATIBLE METRICS
AND INTEGRABLE SYSTEMS
- 09:40 – 10:15 **Ian Marshall:**
POISSON REDUCTION
OF THE SPACE OF POLYGONS
- 10:20 – 10:55 **Tomasz Golinski:**
HIERARCHY OF HAMILTON EQUATIONS
ON BANACH LIE-POISSON SPACE
RELATED TO RESTRICTED GRASSMANNIAN
- 10:55 – 11:25 **Coffee break**
- 11:25 – 12:00 **Giovanni Rastelli:**
THREE AND FOUR-BODY SYSTEMS
IN ONE DIMENSION:
INTEGRABILITY, SUPERINTEGRABILITY
AND DISCRETE SYMMETRIES

Free afternoon