



Newsletter

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Dear Reader,

I confirm: Ljubljana is a very nice small city with an extraordinary density of restaurants along the Ljubljana river. The Slovenian food is quite inexpensive and of excellent quality. The mountainous northern part of Slovenia is magnificent.

The ESMA conference in Ljubljana (September 21-25, practically 21-24) was very busy in four days. Lectures and public conferences were planned from 8.30 a.m. to 9 p.m ! Unfortunately (for them) some announced people were not able to come. We lost a few interesting lectures. Anyway, the people attending the conference could thank them for it gave the attendees some breathing space.

Are you convex ? Non convexity is rather a generic property of natural objects. Non convexity appeared in three mathematical lectures notably through the introduction of two novelties: a family of new polyhedra and the definition of a new topological invariant (a set of convexity indices).

Two lectures were concerned with the creation of decorations through deterministic insertion of motives, while two other lectures were concerned with the construction of patterns using probabilistic tools.

Several Portuguese-Serbian-Slovenian lectures were devoted to the presentation of teaching experiments. The ESMA website http://www.math-art.eu/X_School.php will be enriched by all of these experiences. A group coordinated by Mike Field will keep on gathering them and exchange information and recommendations which could have positive influences on the pedagogical policies regarding both the acceptance of mathematics and





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their teaching.

While a public homage was given to the past Slavik Jablan in the renewed Ljubljana Castle, two other successful evening public events concerned respectively music and films. For the first time, not only cinematographic art but also high standard poetry were present within an ESMA Conference, through uncommon films related to mathematics, created by the American artist John Sims. Could we name « Ljubljana Join » the short film made on the spot by John and Gilles Baroin for the music ?

We owe the introduction of these evening events to the main local organizer of the Conference Mateja Budin. She did a huge successful job. We are greatly indebted to her.

We could also admire artworks by Bittencourt, Field, Hall, Jablan, Jeener, Krašek, Jakovljević - Radojević(string art), Pranville, Roelofs, Savnik, Simic, Soban, and the collection of nodi brought by Kozlov.

Future information about this Conference and the next one will appear in the next Newsletter.

You might want to attend the next ESMA exhibition in Lausanne (EPFL), on November 5 and 6. Thirty thousands people are expected to visit it. They should be able to have a short 8 pages catalogue.

Claude

P.S. The reader will admire here the sculptures made by the Slovenian artist Franc Savnik (<http://www.iq-darila.com/>)
He graduated in mathematics from PMF Zagreb in 1962. In 1959, among his teachers, was Stanko Bilinski who in that year discovered the rhombic dodecahedron of the second kind.





The sculpture is the **rhombic 210-hedron**. It consists of a triacontahedron (30 faces, Kepler 1619) and of 30 rhombic dodecahedra Haffner (1999). The model was made from 390 wooden plates (pear and nut wood).



Borromean ring (nut wood)



trefoil (patinated bronze)



Enneper Surface (wild cherry wood)



Evasiveness (120 equilateral triangles, polished bronze)

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