

**TSG 10**

**Research and development in the teaching and learning of geometry**

**Selection of Abstracts for Expected Papers**

**Transformation Geometry in Primary School According to Michel Demal**

*Charlotte Bouckaert, UREM ULB*

**Using Minkowskian Geometry as an Introduction to Non-Euclidean Geometries**

*Bjørn Felsager, Haslev Gymnasium & HF, Denmark*

**Mathematical Rationality and Semiotic Mediation in the Field of Experience of Geometric Transformations**

*Mario A. Giordano M., UPN, Mexico*

**Competing Discourses that Justify the Geometry Course: What Was New in the Twentieth Century?**

*Gloriana González, Patricio G. Herbst, University of Michigan*

**Cabri within the System**

*Francisco López Hernández, Gustavo Tapia Sánchez, Natividad Nieto Saldaña, Antonio Antolín Fonseca, Universidad Autónoma de Ciudad Juárez, Mexico*

**Engaging Mathematics Teachers in Mathematical Research through Problem Posing and Problem Solving in a Geometry Environment**

*Armando M. Martinez Cruz, California State University*

*Fullerton & Jose Contreras, The University Of Southern Mississippi*

**The Development of Geometrical Thinking of Lebanese Learners between 11-15 Years of Age**

*Naim El-Rouadi, University Of Balamand, Faculty Of Arts And Social Sciences*

*Department Of Education, Lebanon*

**Geometry in context at the primary level : using the environment as a starting point**

*Nancy Vézina, Faculty of Education, University of Ottawa, Canada*

*Lucie DeBlois, Faculté des sciences de l'éducation, Université Laval, Canada*

**From Myth to Reason to Science: the Evolution of Geometrical Thought in Ancient Greece.**

*Antonio Antolín Fonseca, Universidad Autónoma de Ciudad Juárez, México*

### **Drama in Teaching and Learning of Geometry**

*Asuman Duatepe, Hacettepe University, Ankara & Behiye Ubuz, Middle East Technical University, Ankara*

### **Didactic Simulation in Geometry**

*Milan Hejny & Nada Stehlikova*

### **The Conceptual Tools of Euclidean and Dynamic Geometry Environments**

*Francis Lopez-Real & Allen Leung, The University of Hong Kong*

### **Geometrical Pre-Conception in Third Grade Pupils**

*Marchini, Carlo & Rinaldi, Maria Gabriella  
Mathematics Department, University of Parma - Italy*

### **On False Convictions Concerning Geometric Transformations of the Plane In Mathematics Students' Reasoning**

*Bozena Pawlik, Institute of Mathematics, Pedagogical University  
Podchorazych 2, 30-084 Cracow, POLAND.*

### **ADOPTING CINDERELLA AND SPHERICAL SKETCHPAD AS EXPLORATORY TOOLS: SOME REFLECTIONS ON MOTIVATING FACTORS**

*Margaret P. Sinclair, York University*

### **Student's Development of Geometrical Concepts through a Dynamic Learning Environment**

*Isil ÜSTÜN and Behiye UBUZ, Middle East Technical University, Ankara*

### **Skills of Generalization in Learning Geometry: Are the Students Ready to Use Them?**

*Oleksiy Yevdokimov, Kharkov State Pedagogical University, Ukraine*

### **A Triangle and Angle Story**

*C. T. Zahn*

### **How experiences from physical activities in snow can influence a twelve- year-old's learning of geometry**

*Anne Birgitte Fyhn, Department of Learning and Teacher Education (PLP), University of Tromsø, Norway*