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Online Conference



**Algebraic  
and Geometric  
Methods of Analysis**

dedicate to the memory  
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## LIST OF TOPICS

- Topological methods in analysis
- Geometric problems of complex and mathematical analysis
- Algebraic methods in geometry
- Differential geometry in the whole
- Geometry and topology of differentiable manifolds
- General and algebraic topology
- Geometric and topological methods in natural sciences

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# The invariants of planar 3-webs with respect to group of symplectic diffeomorphisms, for the case of the conformal group

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The classical web geometry ([1],[2],[4]) studies invariants of foliation families with respect to pseudogroup of diffeomorphisms. Thus for the case of planar 3-webs the basic semi invariant is the Blaschke curvature ([3]). It is also curvature of the Chern connection ([4]) that are naturally associated with a planar 3-web. Remark that we have in addition to the diffeomorphism group two infinite dimensional groups: symplectic and conformal groups.

We investigate invariants of planar 3-webs with respect to group of symplectic diffeomorphisms, for the case of the conformal group see ([5]). We found the basic symplectic invariants of planar 3-webs that allow us to solve the symplectic equivalence problem for planar 3-webs in general position. The Lie-Tresse theorem ([2]) gives the complete description of the field of rational symplectic differential invariants of planar 3-webs. We also give normal forms for homogeneous 3-webs, i.e. 3-webs having constant basic invariants.

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