

8th International Conference on Symmetries and Integrability of Difference  
Equations (SIDE8) **June 22–28, 2008**  
8<sup>e</sup> Conférence internationale “Symétrie et intégrabilité des équations aux  
différences” (SIDE8) **22–28 juin, 2008**

## Grassmannians, KP tau-functions and Poisson structures

**Michael Gekhtman**

Department of Mathematics  
University of Notre-Dame  
Notre-Dame, MI 46556-5683  
USA

mgekhtma@nd.edu

### Abstract

The talk is based on joint works with **A. Kasman**, **M. Shapiro**,  
and **A. Vainshtein**. First, we will give a characterization of linear oper-  
ators whose natural action on Grassmannians generate KP tau-functions.  
Then Poisson properties of the Postnikov’s map from directed weighted  
networks in a disk into Grassmanians will be described.