SCIENTIFIC REPORT OF DANIELE ZUDDAS
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I traveled to Bulgaria from 2 to 9 June 2011. At the international conference 'Geometry, Integrability and Quantization' given in Varna I had the great opportunity to meet outstanding researchers in the field of geometric quantization and Kälher geometry. The conference was about interactions between geometry and physics. Some talks were very interesting for my research, and with Andrea Loi we started a new project about lagrangian submanifolds of hermitian symmetric spaces of compact type. Our starting point is to consider a symplectomorphism between the open ball (D^{2n}, ω_0) endowed with the standard symplectic form ω_0 and the complement of suitable complex hypersurface in the hermitian symmetric domain (such symplectomorphism exists by a theorem of Di Scala and Loi). Then the problem can be translated to (D^{2n}, ω_0).

Also, I had the time to conclude my paper entitled 'Universal Lefschetz fibrations' about the topology of Lefschetz fibrations over the disk (where the universality notion is analogous to that of universal vector bundles).

In conclusion my permanence in Varna was very productive.

Cagliari, June 10, 2011

Daniele Zuddas