

Micro-local Analysis on Coherent D-Modules to Moduli Problems on L-holomorphic bundles

Francisco Bulnes

Research Department in Mathematics and Engineering, TESCHA, Mexico

E-mail: francisco.bulnes@tesch.edu.mx

ABSTRACT

We consider the Kashiwara theorem equivalences between derived categories on coherent D-modules and holomorphic G-bundles. These equivalences permit map points of the moduli space $M\text{Flat}(G, C)$, and points of a Hecke eigensheaf for $BG(C)$; which is a moduli space of holomorphic vector G-bundles on a complex C, of D-Modules. Finally this establishes an important result on integration in cycles and their equivalences defined by functors of geometrical integral transforms in moduli problems.