

LERAY'S QUANTIZATION OF PROJECTIVE DUALITY

ANDREA D'AGNOLO AND PIERRE SCHAPIRA

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1. Introduction. Let \mathbb{P} be a complex n -dimensional projective space, \mathbb{P}^* the dual projective space, and \mathbb{A} the hypersurface of $\mathbb{P} \times \mathbb{P}^*$ given by the incidence relation $\mathbb{A} = \{(z, \zeta) \in \mathbb{P} \times \mathbb{P}^*; \langle z, \zeta \rangle = 0\}$. We shall consider the correspondence $\mathbb{P} \xleftarrow{f} \mathbb{A} \xrightarrow{g} \mathbb{P}^*$, where f and g are the natural projections.

It is well known that the conormal bundle to \mathbb{A} in $\mathbb{P} \times \mathbb{P}^*$ is the Lagrangian manifold associated to a contact transformation between $T^*\mathbb{P}$ and $T^*\mathbb{P}^*$, the cotangent bundles to \mathbb{P} and \mathbb{P}^* , respectively, with the zero-section removed. This contact transformation induces an equivalence of categories between constructible sheaves on \mathbb{P} modulo locally constant sheaves and the similar category on \mathbb{P}^* (cf. Brylinski [5]), or between coherent \mathcal{D} -modules on \mathbb{P} modulo flat con-

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