

“Levi core”, Diederich-Fornaess index, and D’Angelo forms

Gian Maria Dall’Ara

Istituto Nazionale di Alta Matematica “F. Severi”

dallara@altamatematica.it

Samuele Mongodi

Politecnico di Milano (Italy)

samuele.mongodi@polimi.it

We introduce the notion of “Levi core” of a CR manifold M of hypersurface type, and prove that, whenever M is the boundary of a smoothly bounded pseudoconvex domain Ω , the Diederich-Fornaess index of Ω equals a numerical invariant of the Levi core. This line of research is connected and extends recent results of B. Liu, M. Adachi, and J. Yum.