DESCRIPTION AND CLASSIFICATION OF ISOPARAMETRIC SUBMANIFOLDS IN THE COMPLEX HYPERBOLIC SPACE

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ABSTRACT. An isoparametric hypersurface of a Riemannian manifold is a hypersurface such that all its sufficiently close parallel hypersurfaces have constant mean curvature. In this talk we will present different families of isoparametric hypersurfaces in the complex hyperbolic space. Moreover, using their relation with some families of isoparametric hypersurfaces in the anti De Sitter space we deduce a classification in the complex hyperbolic space.

REFERENCES

[1] J. C. Díaz-Ramos, M. Domínguez-Vázquez, V. Sanmartín-López, Isoparametric hypersurfaces in complex hyperbolic spaces, *Adv. Math.* **314** (2017), 756–805.