Polar Actions On Complex Hyperbolic Spaces

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An isometric action on a Riemannian manifold is called polar if there exists a submanifold that intersects all the orbits of the action perpendicularly. In this talk I present the classification of polar actions on complex hyperbolic spaces. Surprinsingly, there are uncountably many examples that do not have a dual counterpart in complex projective spaces. This is a joint work with Miguel Domínguez-Vázquez and Andreas Kollross.