

Real hypersurfaces with Reeb invariant shape operator in the complex hyperbolic quadric

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Abstract. First, we introduce the notion of Reeb invariant shape operator for real hypersurfaces in the complex hyperbolic quadric $Q^{m*} = SO_{2,m}^2/SO_m SO_2$, $m \geq 3$. Next, we give a complete classification of real hypersurfaces with *Reeb invariant shape operator* in the complex hyperbolic quadrics Q^{m*} .

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