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ON APPROXIMATION IN BA SPACES FOR JACKSON–MATSUOKA POLYNOMIALS ON THE SPHERE

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Abstract. We consider the best approximation by Jackson-Matsuoka polynomials on the unit sphere of $\mathbb{R}^d$ in the Ba space. Establish and use the relations between K-functionals and modulus of smoothness on the sphere, we obtain the direct and inverse estimate of approximation by these polynomials for the h-spherical harmonics.

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