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In this work we establish a sampling theorem for functions in Besov spaces on the  $d$ -dimensional sphere  $\mathbb{S}^d$  in the spirit of their recent counterparts established for  $\mathbb{R}^d$  by Jaming-Malinnikova in [1]. The main tool is the needlet decomposition given by Narcowich et al. in [2].

References.

[1] Ph. Jaming & E. Malinnikova, An uncertainty principle and sampling inequalities in Besov spaces. *Journal of Fourier Analysis and Applications* 22 (2016), 768–786.

[2] F. Narcowich, P. Petrushev & J. Ward, Decomposition of Besov and TriebelLizorkin spaces on the sphere. *Journal of Functional Analysis* 238 (2006), 530–64.

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