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**Ritva Hurri-Syrjanen** and **Fernando Lopez-Garcia\*** (fal@cpp.edu). *On the weighted fractional Poincaré-type inequalities.*

Weighted fractional Poincaré-type inequalities are proved, where the weights are powers of the distance to the boundary. The classical fractional Poincaré inequality holds for any bounded domain, while the validity of this new version depends on the geometry of the domain. We consider here John domains, which is a class that contains convex and Lipschitz domains.

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