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Counts-in-Cell statistics from LOFAR Two-metre Sky Survey Data Release 2

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The Lofar Two-meter Sky Survey (LoTSS) had its second data release (DR2) published recently. It provides the largest radio sources catalogue to date, including 4.4 million sources and covering 5600 square degrees of sky, and therefore an excellent opportunity for studies of the large-scale structure of the Universe. In this poster flash talk I present results based on one-point correlation function. The one-point or counts-in-cell statistic provides information on the spatial distribution of the radio sources. I show that the distribution of radio sources is non-Poissonian which is likely due to multiple physical components of individual sources and it follows a Cox process. We use the statistical moments of the counts-in-cell to calculate the two-point correlation function.