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**Gil Kur\*** ([gilkur@mit.edu](mailto:gilkur@mit.edu)), Cambridge, MA 02139. *Connections between communication complexity and spherical geometry.*

In this talk, we are going to present an extremal problem in spherical geometry that is mainly motivated from Communication complexity. This problem was studied by Gao, Hug and Schneider in a restricted case.

Communication complexity is an area in theoretical computer science that quantifies the minimal amount of communication (in bits) required for multiple agents to solve a given task.

We show that proving such bounds for fundamental tasks reduces to extremal problems in spherical geometry which are of independent interest. (Received August 18, 2020)