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**Proofs of the Kochen-Specker theorem based on the 600-cell** P.K. ARAVIND, MORDECAI WAEGELL, Worcester Polytechnic Institute, NORMAN MEGILL, Boston Information Group, MLADEN PAVICIC, ITAMP, Harvard University — It is shown that the system of 60 rays and 75 bases derived from the vertices of a 600-cell (a regular polytope in four dimensions) contains over a hundred million parity proofs of the Kochen-Specker theorem. An overview of the proofs is given, some examples of them are presented and the significance of the results is discussed.

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