COUNTING CRYSTALLOGRAPHIC GROUPS IN LOW DIMENSIONS

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Abstract. We present the results of our computations concerning the space groups of dimension 5 and 6. We find 222 018 and 28 927 922 isomorphism types of these groups, respectively. Some overall statistics on the number of $\mathbb{Q}$-classes and $\mathbb{Z}$-classes in dimensions up to six are provided. The computations were done with the package CARAT, which can parametrize, construct and identify all crystallographic groups up to dimension 6.