



## ENUMERATION OF MAPS REGARDLESS GENUS

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A combinatorial map is an abstraction of geometric map - graph cellularly embedded into a surface. Map enumeration is related with classical results of Hurwitz (1981) on the number of non-isomorphic covers over the sphere having simple branch points of order two and of Hall (1949) who derived a formula for the number of subgroups of given index in a free group. In 1961-1964 Tutte developed methods for counting various families of planar maps. Tutte's pioneering works had a lot of successors. In our talk we apply a classical combinatorial approach to enumerate rooted maps with given number of edges regardless genus. Next we apply a new technique developed by the authors to compute isomorphism classes of such maps. The results gives information on the ratio between the number of reflexible and chiral maps with given number of edges. No result of this sort was known.