

# MULTIZETA VALUES AND PERIODS ON MODULI SPACE ABSTRACT

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The talk will begin with a definition of the real numbers called multiple zeta values. These numbers form a  $\mathbb{Q}$  algebra. The game with this algebra is to give a set of algebraic relations between its elements which is conjectured to generate all algebraic relations. This set is given by two families, of which we will study one on detail here: the shuffle relation. This relation can be seen by calculating the pullback of a forgetful map between moduli spaces. By a theorem of Francis Brown, one can deduce that calculating the pullbacks of different product maps between moduli spaces gives more relations on products of multiple zeta values. The above conjecture implies that all these are generated by the two families of relations mentioned above, but this remains an open question.