## FIM Minicourse

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# Multiplicatively defined sets with additive structure

### November 10 - 20, 2015

TueNovember 1010:15 - 12:00FriNovember 1310:15 - 12:00TueNovember 1710:15 - 12:00FriNovember 2010:15 - 12:00

HG G 19.1, ETH Zürich, Rämistrasse 101

#### Abstract

In this minicourse we examine which sets S of positive integers, typically defined in a multiplicative way, such as the set of squares or the set of primes, can be written as a sumset S=A+B. More generally, we study how large additive substructures (of this or of a generalized type) in multiplicatively defined sets can be. The methods involved will include methods from additive combinatorics and analytic number theory, such as sumset growth and the large sieve.

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