

## Mathematical Colloquia

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**Monday, 25 October 2021**

17:15 h, lecture room 119 (ExWi)

**Prof. Ilya Molchanov, University of Bern**

# The semigroup of metric measure spaces

## joint work with S.N. Evans (Berkeley)

**Abstract:** The family of metric measure spaces can be endowed with the semigroup operation being the Cartesian product. The aim of this talk is to present a generalisation of the fundamental theorem of arithmetic for metric measure spaces that provides a unique decomposition of a general space into prime factors. These results are complementary to several other results available for metric spaces (like de Rham's theorem on decomposition of manifolds). Finally, the infinitely divisible and stable laws on the semigroup of metric measure spaces are characterised.

### **CORONAVIRUS SAFETY MEASURES:**

From September 20, 2021, the certificate requirement applies to all activities that take place within the framework of the University of Bern, regardless of the number of participants. Compliance with the certificate requirement will be checked by means of random sampling.

All other measures, especially the social distancing rules and hygiene recommendations, remain in place and apply until further notice.