On Rotary Mappings and Transformations

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ABSTRACT

The presented lecture deals with the rotary mappings and transformations. We found the necessary and sufficient conditions for (pseudo -) Riemannian space to admit rotary mappings. This condition has a form of closed Cauchy type system of PDEs depending on no more than 3 real parameters. Further, we study basic equations of the infinitesimal rotary transformations in detail and obtain the fundamental equations of these transformations.