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The book presents the proceedings of the VIII-th International Conference on Finsler Extensions of Relativity Theory (FERT-2012) which took place during June 25th – July 1st, 2012 in Moscow and Fryazino, Russia. This Conference continues the series of Conferences held annually since 2004: Moscow, Russian Federation (2004, 2007); Moscow–Fryazino, Russian Federation (2009, 2010); Cairo, Egypt (2005, 2006, 2008); Brashov, Romania (2011). The main topics of the FERT-2012 cover the following areas: the Rashevskii polymetric geometry; symmetries of Finsler spaces; Finsler metric functions and their spaces; polylinear symmetric forms of n vectors as Finsler extensions of scalar product; linear Finsler spaces and their connection with hypercomplex numbers; isometric and conformal transformations of Finsler spaces; Finsler spaces and n-ary operations; Finsler extension of relativity theory; algebraic fractals; experimental investigations and astrophysical observations designed to detect possible evidence for the anisotropy of real Space-Time.

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