



## FINSLER SPACES AND ANALOGUE GRAVITY

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Some recent results on wavefronts propagation and Huygens's principle in Finsler spaces are reviewed. Such results have direct application in analogue gravity models, for which the Fermat's principle of least time naturally gives origin to an underlying Finslerian geometry. Two explicit examples motivated by recent experimental results will be discussed: the propagation of surface waves in flumes and in vortices. For both examples, we have distinctive directional spacetime structures, namely horizons and ergospheres, respectively, which are associated with certain directional divergences in the underlying Finslerian (Randers) geometry. These examples show that Finsler geometry may provide a fresh view on the causal structure of spacetime, not only in analogue models but also for General Relativity.