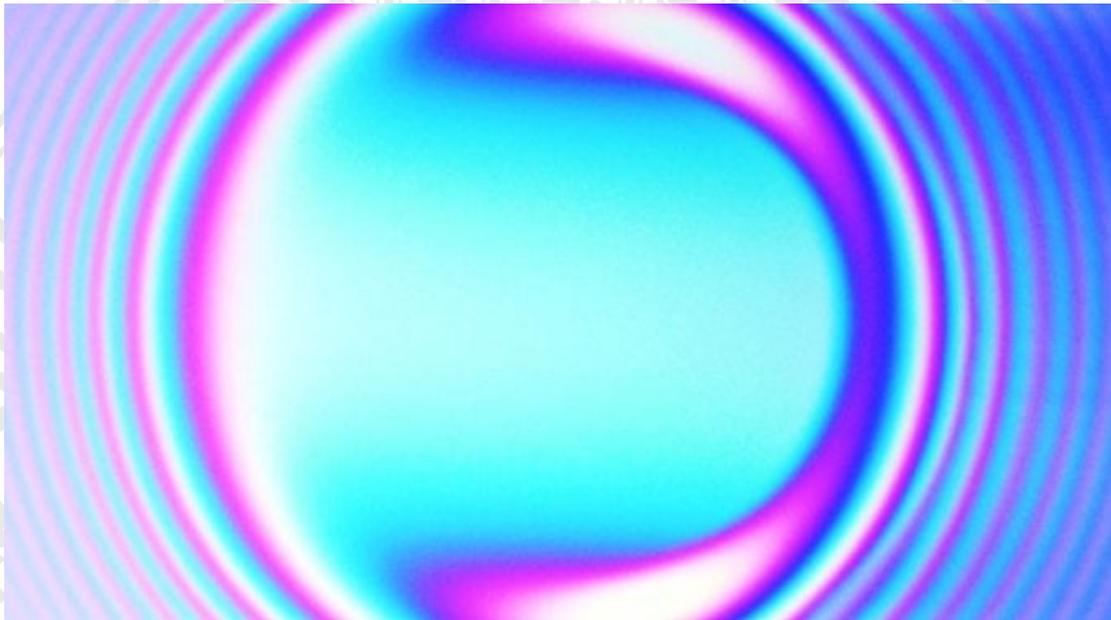


# PHYSIKALISCHES KOLLOQUIUM

AM 10. DEZEMBER 2018 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



(C) TRIBONET. A FILM MENISCUS IN ELASTOHYDRODYNAMIC CONTACT

## SCIENCE THRILLER: THE DRAMATIC DESTINY OF ALEXANDER MOHRENSTEIN-ERTEL AND THE HISTORY OF ELASTROHYDRODYNAMICS

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Presentation is devoted to the life and work of Alexander Mikhailovich Ertel, the founder of elastohydrodynamics. He was the first to solve problems of hydrodynamic lubrication accounting for effects of elastic deformation of the bodies in contact as well as for the dependence of the viscosity of the lubricant on pressure and temperature, thereby opening a new branch of tribology – elastohydrodynamics. However, due to complicated historical entanglements, the real authorship remained unknown over many years. We investigate the circumstances of the creation of elastohydrodynamics and provide a short sketch of the main ideas of the early works of Mohrenstein-Ertel. The biography of Mohrenstein-Ertel is like a criminal novel: the 20th century history is reflected in the hard fate of this scientist and Russian history up to the time of Pushkin can be traced in his genealogy.