

## ENTROPY AND STATISTICAL MECHANICS: FOUNDATIONS

	<b>BG</b> (thermal equilibrium)	<b><math>q \neq 1</math></b> (thermal metaequilibrium, nonequilibrium)
<b>Distribution of velocities at equilibrium</b>	<b>Maxwell 1860</b>	<b>R. Silva, A.R. Plastino, J.A.S. Lima</b> Phys Lett A 249, 401 (1998) <b>R.S. Mendes and C. Tsallis</b> Phys Lett A 285, 273 (2001)
<b>Kinetic equation</b> Molecular chaos hypothesis ( <i>Stosszahlansatz</i> )	<b>Boltzmann 1872</b>	<b>J.A.S. Lima, R. Silva, A.R. Plastino</b> Phys Rev Lett 86, 2938 (2001) <b>G. Kaniadakis</b> Physica A 296, 405 (2001)
<b>Optimization of entropy with constraints</b>	<b>Gibbs 1902</b>	<b>C. Tsallis</b> J Stat Phys 52, 479 (1988) <b>E.M.F. Curado and C. Tsallis</b> J Phys A 24, L69 (1991) <b>C. Tsallis, R.S. Mendes, A.R. Plastino</b> Physica A 261, 534 (1998)
<b>Steepest descent</b>	<b>Darwin-Fowler 1922</b>	<b>S. Abe and A.K. Rajagopal</b> J Phys A 33, 8733 (2000)
<b>Microcanonical ensemble counting</b>	<b>Balian-Balazs 1987</b> <b>Kubo et al 1988</b>	<b>S. Abe and A.K. Rajagopal</b> Phys Lett A 272, 341 (2000) <b>Europhys Lett 55, 6 (2001)</b>
<b>Conditions of uniqueness of S</b>	<b>Shannon 1948</b>	<b>R. J. V. Santos</b> J Math Phys 38, 4104 (1997)
<b>Compact conditions of uniqueness of S</b>	<b>Khinchin 1953</b>	<b>S. Abe</b> Phys Lett A 271, 74 (2000)
<b>Limit theorems</b>	<b>De Moivre 1733</b> <b>Laplace 1744</b> <b>Gauss 1809</b> <b>Lévy 1937</b>  <b>Khinchin 1949</b>	<b>S. Umarov, C. Tsallis and S. Steinberg</b> Milan J Math 76, 307 (2008) <b>S. Umarov, C. Tsallis, M. Gell-Mann and S. Steinberg</b> J Math Phys 51, 033502 (2010) <b>S. Abe and A.K. Rajagopal</b> Europhys Lett 52, 610 (2000)