

AGA 8: Mathematical Modelling of Conflicts

Time: Friday 14:50–15:10

Location: HSZ/0002

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Increased Geopolitical Instability as a Consequence of Changed Equilibrium Country Size — ●RICHARD SCHUBERT —
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In the proposed contribution an analogy is established between the equilibrium size of magnetic domains and the historically formed size of countries. The equilibrium size of magnetic domains is given by a minimum of the energy function consisting of different components obeying different scaling laws, e.g. scaling to the cube or the square of the domain size. Thus, different materials have different average domain sizes. The size of the historically formed countries as well depends on a cost/benefit equilibrium, which can also be described by

a kind of energy function. As a consequence of digitization and other changes in technology the parameters of the material countries are made of have changed dramatically leading to a different equilibrium country size. As a consequence, the current geopolitical situation is in a thermodynamic sense highly unstable. In the contribution, it will be shown how the recent developments in the Yellow Sea, Ukraine, and Catalonia could also be interpreted in the framework of this model (ref to 2017). Trying to make suggestions on how to achieve a smooth transition from the old state of the system to a new state closer to equilibrium is, however, outside the scope of the proposed contribution. Part of the ideas are based on the author's long-standing experience in organizing political background discussions http://berlin-3d-art.de/politische_hintergrundgespraech.html