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Diversity of Global Change Factors and Tipping Points

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Global change is not only about climate change. Several changes in the Earth System occur concurrently and sequentially, and still, novel factors are being identified as emerging problems such as microplastic pollutants. Global change is diverse; nonetheless, little is known about the role of multiple global change co-occurrences. Can we safely anticipate that the effects of multiple global change factors are independent of each other? Or, should we be concerned about the potential of their synergistic interaction, where the joint effect of multiple factors can be larger than the addition of their single effects?

Our talk focuses on ‘the *diversity* of global change factors’—How the diversity of global change factors can increase, and how the diversity of global change can affect environmental systems in the context of tipping points. We also show empirical evidence that an increasing number of global change factors can cause abrupt shifts in a soil system (cf. Rillig *et al.* 2019 in *Science*). We emphasize the urgent need to investigate the expected roles of an increasing diversity of global change factors as an emerging threat to nature and society.