Controversy-seeking in rumor-telling activity across polarized networks: theoretical predictions and empirical observations

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In this talk, we present a model of rumor-telling in opinion polarized networks investigated through extensive computer simulations. The key mechanism is the coupling between one's opinions and their leaning to spread a given information, either by supporting or opposing its content. We report that a highly modular topology of polarized networks strongly impairs rumor spreading, but the couplings between agent's opinions and their spreading/stifling rates can either further inhibit or, conversely, foster information propagation, depending on the nature of those couplings. In particular, a controversy-seeking mechanism, in which agents are stimulated to postpone their transitions to the stiffer state, enhances the rumor spreading. Therefore such a mechanism is capable of overcoming the bottlenecks imposed by loosely connected modular structures. We present empirical evidence for controversy-seeking interactions in political debate on Twitter during the last two Brazilian elections.