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**Role of Committed Minorities in Times of Crisis** MALGORZATA TURALSKA, Duke University, PAOLO GRIGOLINI, University of North Texas, BRUCE J. WEST, Duke University — The surprising social phenomena of the Arab Spring and the Occupy Wall Street movement posit the question of whether the active role of committed groups may produce political changes of significant importance. Under what conditions are the convictions of a minority going to dominate the future direction of a society? We use a Cooperative Decision Making (CDM) model to study the effect of committed minorities on group behavior in time of crisis. The CDM model has been shown to generate consensus through a phase-transition process that at criticality establishes long-range correlations among the individuals within a model society. In a condition of high consensus, the correlation function vanishes, thereby making the network recover the ordinary locality condition. However, this state is not permanent and times of crisis occur when there is an ambiguity concerning a given social issue. The correlation function within the cooperative system becomes similarly extended as it is observed at criticality. This combination of independence (free will) and long-range correlation makes it possible for very small but committed minorities to produce substantial changes in social consensus.

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