

## **How does order grow out of disorder? – A journey inspired by C.C. Lin**

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In spite of the chaotic picture predicted by the second law of thermodynamics, the world we live is perfectly organized. So how does order grow out of disorder? From various flow patterns in fluids, to the spiral structure in galaxies, to protein dynamics in nano-scales, Prof. C.C. Lin made great contributions to this fundamental question from three completely different aspects. His legend as a top applied mathematician will be reviewed as the first part of my talk. In the second part, I will focus on the mechanisms of protein folding and misfolding, an open question which has been considered thoroughly by Prof. Lin in his last ten years. Some new developments inspired by him will be discussed in details.