1. Record Nr. UNINA9910495990703321 Autore Lecuit Thomas Titolo The Dynamics of Living Systems: Inaugural lecture given on Thursday 27 April 2017 / / Thomas Lecuit Paris, : Collège de France, 2020 Pubbl/distr/stampa **ISBN** 2-7226-0560-0 Collana Leçons inaugurales Altri autori (Persone) HeardEdith LecuitThomas Soggetti Dynamics & statics **Biophysics** Biology, life sciences Life sciences: general issues Developmental biology Molecular biology Cellular biology (cytology) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto How can we explain the fundamental paradox of living matter, which combines stability and robustness of form with constant internal dynamics? It is not only the genetic information contained in every cell, but also numerous stochastic biomolecular processes that are at work in morphogenesis. In addition, the shaping of an organism is driven by mechanical forces that operate within and between cells, across tissues and organs. The dynamics of morphogenesis is a self-organized process that emerges from biological control and physical constraints at all scales. Its study is currently bringing together a fast-growing

organisms.

interdisciplinary community that observes, analyses and models living