



From Molecules to Living Organisms: An Interplay Between Biology and Physics

By Eva Pebay-Peyroula, Hugues Nury, Francois Parcy, Rob W. H. Ruigrok, Christine Ziegler

Oxford University Press. Hardback. Book Condition: new. BRAND NEW, From Molecules to Living Organisms: An Interplay Between Biology and Physics, Eva Pebay-Peyroula, Hugues Nury, Francois Parcy, Rob W. H. Ruigrok, Christine Ziegler, The book gathers lecture notes of courses given at the 2014 summer school on integrated biology in Les Houches, France, Session CII. It addresses an emerging field ranging from molecules to cells and to organisms. Through examples it presents a new way of thinking using a combination of interdisciplinary and cutting-edge methods, bridging physics and biology beyond current biophysics. Important novel developments are expected in the coming years that may well introduce paradigm shifts in biological science. The school had the ambition to prepare participants to become major actors in these breakthroughs. The power of integrated approaches is illustrated through two cases: interactions between viruses and host cells, and flower development. The role of forces in biology, as well as their mathematical modeling, is illustrated in both processes: how they allow flower organs to emerge or how they control membrane fusion during virus budding. The book also underlines the importance of conformational changes and dynamics of proteins particularly during membrane processes. It explains how membrane proteins can be...



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Reviews

The book is straightforward in go through easier to recognize. it was actually writtern extremely perfectly and useful. I am very happy to explain how this is actually the greatest publication i have read through within my individual life and might be he finest ebook for actually.

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It is great and fantastic. Better then never, though i am quite late in start reading this one. Its been written in an extremely simple way and is particularly only right after i finished reading this ebook where actually changed me, affect the way i really believe.

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