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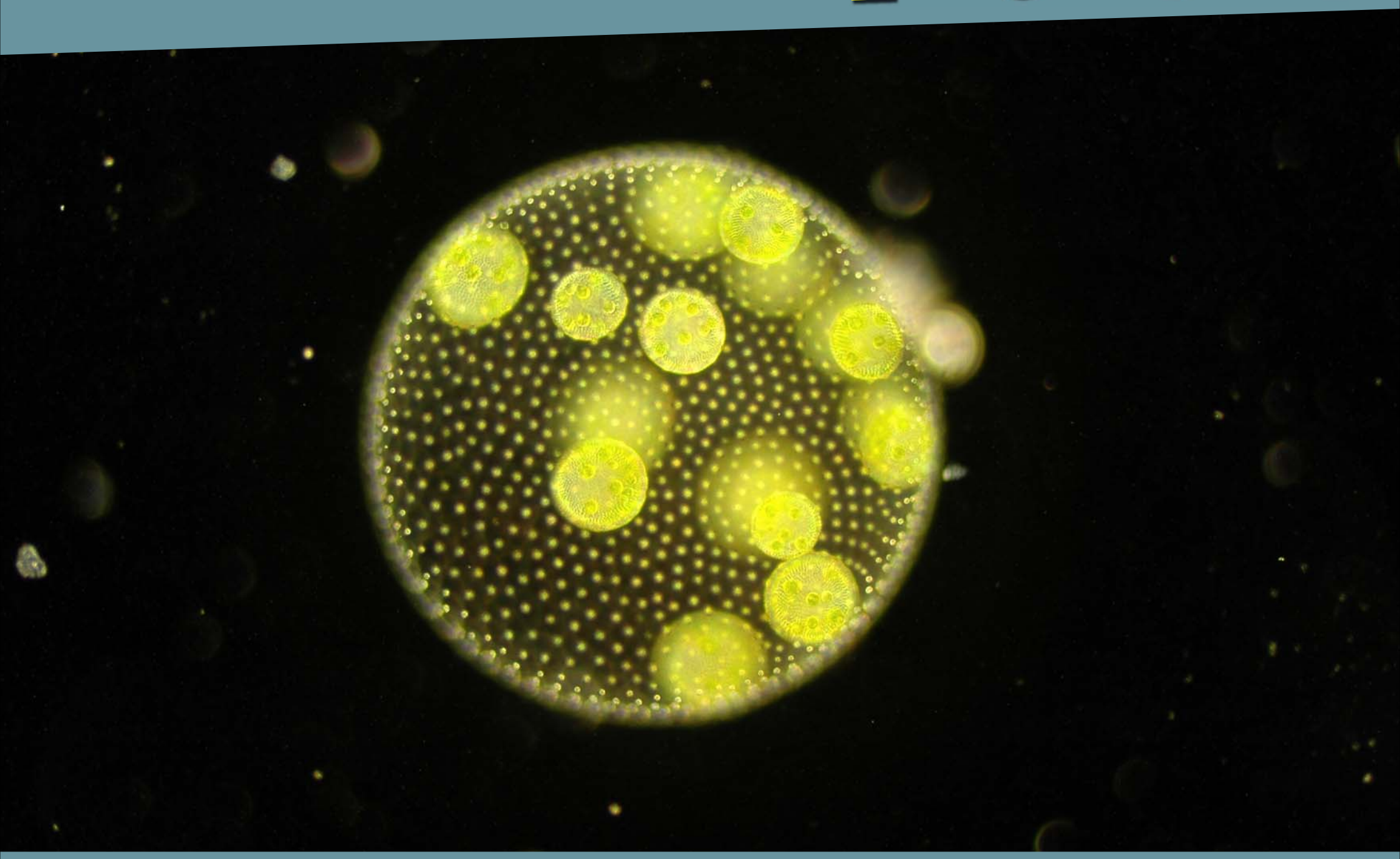
PHYSICS COLLOQUIA 2014



One of the most fundamental issues in evolutionary biology is the nature of transitions from unicellular organisms to multicellular ones. Many basic questions arise in this context: What are the advantages of being larger?
What are the driving forces behind the appearance of distinct cell types?
In this talk I will describe an approach to these broad questions based on the use of a particular lineage of green algae which serves not only as a model for evolutionary studies, but also for many aspects of biological physics and fluid dynamics associated with eukaryotic flagella, the tail-like appendages that confer motility.
I will focus on experimental and theoretical results from my lab that examine the fluid flows driven by these flagella, their synchronization, and the mechanism by which multicellular organisms composed of thousands of cells exhibit accurate phototaxis in the absence of a central nervous system.

Ray Goldstein

University of Cambridge, UK

20 MAY

Evolution of Biological Complexity

UNIVERSITÀ DEGLI STUDI DI MILANO
DOTTORATO DI RICERCA IN FISICA
ASTROFISICA E FISICA APPLICATA

Gli incontri si terranno alle **ore 15:00**
nell'**aula A** del **DIPARTIMENTO DI FISICA**
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