



The Abdus Salam
International Centre
for Theoretical Physics



Workshop on the Biophysics of Fungal Spore Dispersal and its Relevance to Plant Disease

Description:

Growing food insecurity is a major concern in the developing world. Reducing chemical use for pest management is an urgent need in Africa and globally, for cost, food safety, and environmental sustainability. The biophysics of pathogen spore dispersal is hardly studied but offers potential targets for the disruption of plant disease. Research on this topic can guide more accurate use of fungicides in the short term and explore less toxic alternatives in the long term. This workshop aims to stimulate research on basic phenomena of fungal spore dispersal and explore how research might be used in applied contexts.

TOPICS:

- Introduction to biophysics
- Introduction to mycology and biology of spore development and release
- Environmental factors influencing fungal spore development, release, and dispersal
- Basics of fluid dynamics
- Physics of spore dispersal
- Applications of the physics of spore dispersal

SPEAKERS:

Carlos AGUILAR-TRIGUEROS, University of Jyväskylä
Antonio CELANI, ICTP
Tjaart KRÜGER, University of Pretoria
Veera NORROS, The Finnish Environment Institute (SYKE)
Anne PRINGLE, University of Wisconsin-Madison
Agnese SEMINARA, University of Genoa
Mark UNGER, The Wonder Lab



10 - 14 June 2024



Future Africa, Pretoria, South Africa



**Deadline:
19 February 2024**

DIRECTORS:

Tjaart KRÜGER, University of Pretoria
Anne PRINGLE, University of Wisconsin-Madison
Bernard SLIPPERS, FABI, University of Pretoria

LOCAL ORGANISER:

Antonio CELANI, ICTP, Italy

FURTHER INFORMATION:

E-mail: smr3942@ictp.it

Web: <http://indico.ictp.it/event/10480/>

Female scientists are encouraged to apply.



GRANTS:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

