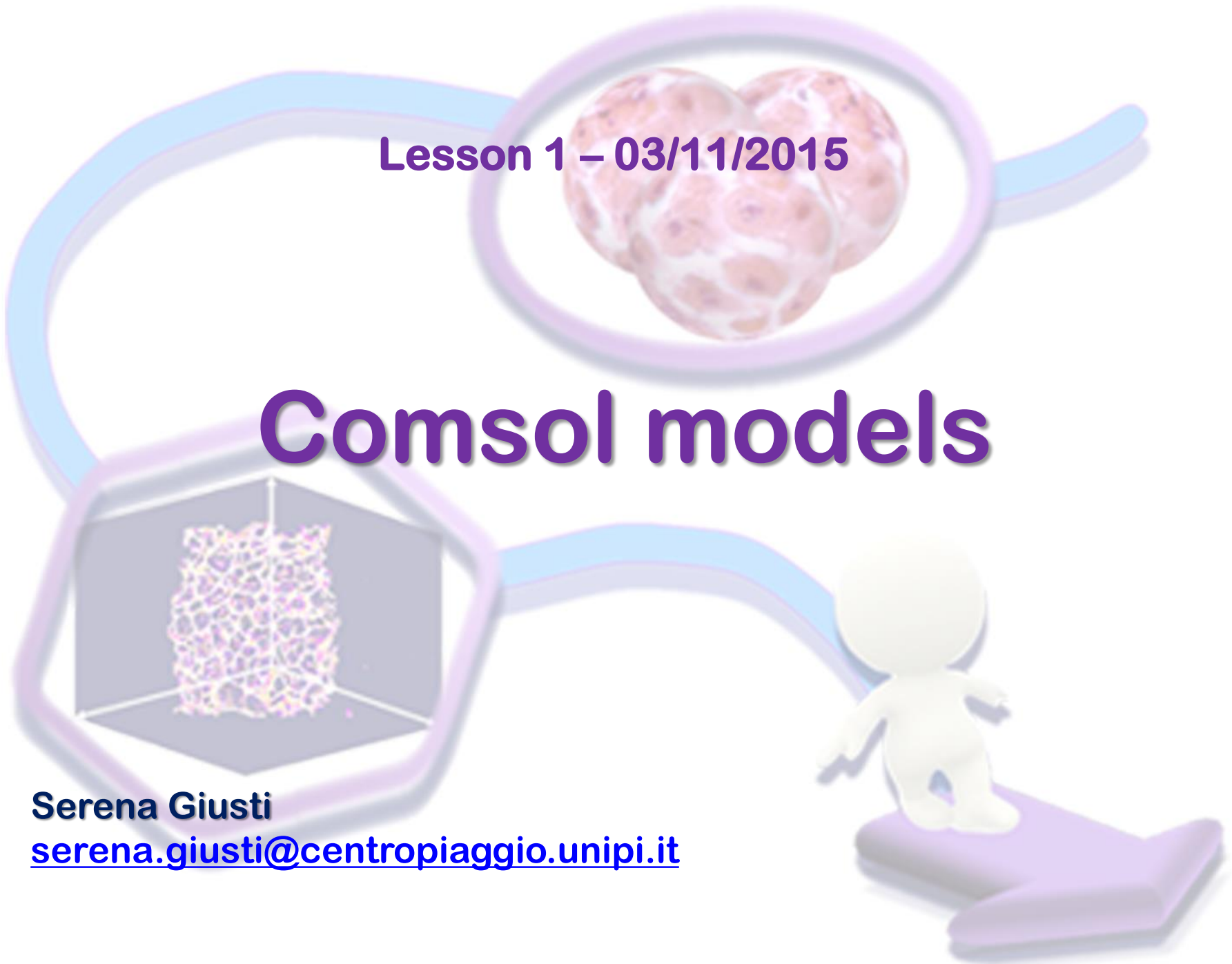


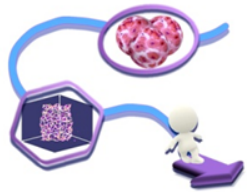
Lesson 1 – 03/11/2015

# Comsol models

Serena Giusti

[serena.giusti@centropiaggio.unipi.it](mailto:serena.giusti@centropiaggio.unipi.it)





# Gradient Generator

## Obiettivo:

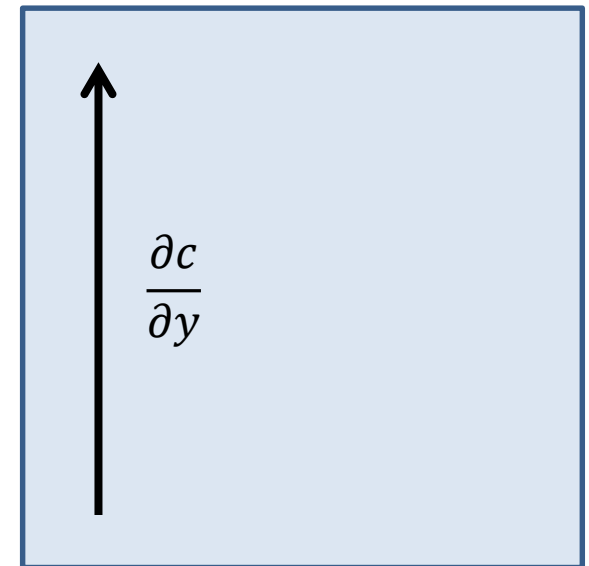
Implementare un modello Comsol di una camera a gradiente, con n ingressi e velocità di ingresso variabile parametricamente

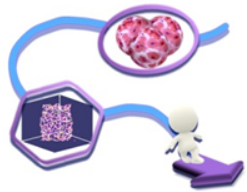
## Physics:

Incompressible Navier-Stokes  
Convection-Diffusion

## Dati modello:

Camera	->	50 mm x 25 mm (h = 5 mm)
Canali	->	5 mm x 40 mm (h = 5 mm)
Vin	->	5 : 10 : 50 $\mu\text{m/s}$
D	->	$10^{-8} \text{ m}^2/\text{s}$ (canali, camera)
Cin	->	0.01 mM

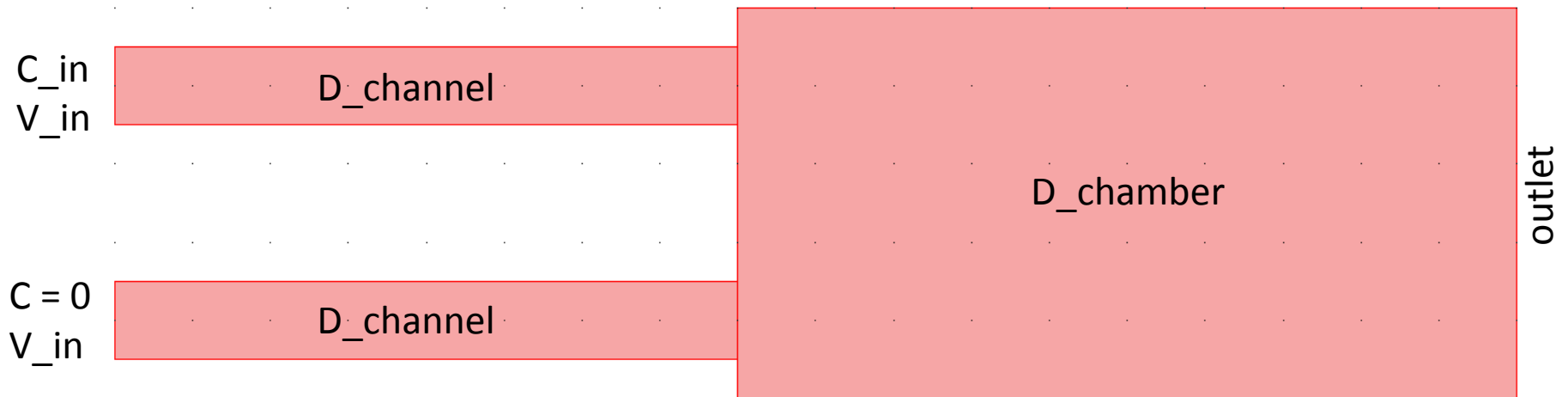


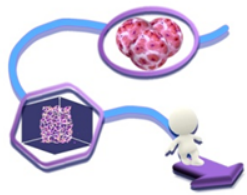


# Grandient Generator

## Obiettivo:

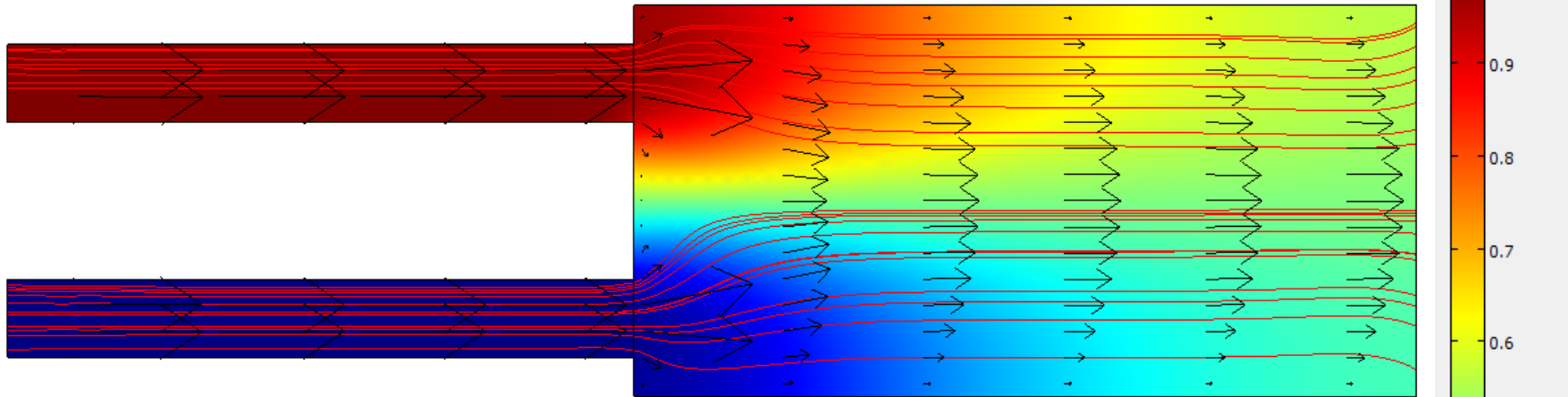
Implementare un modello Comsol Multiphysics di una camera a gradiente, con  $n$  ingressi e velocità di ingresso variabile parametricamente





# Grandient Generator

$V_{in} = 10 \text{ } \mu\text{m/s}$



$V_{in} = 50 \text{ } \mu\text{m/s}$

