
LEM/ODT application to counter-flow flames

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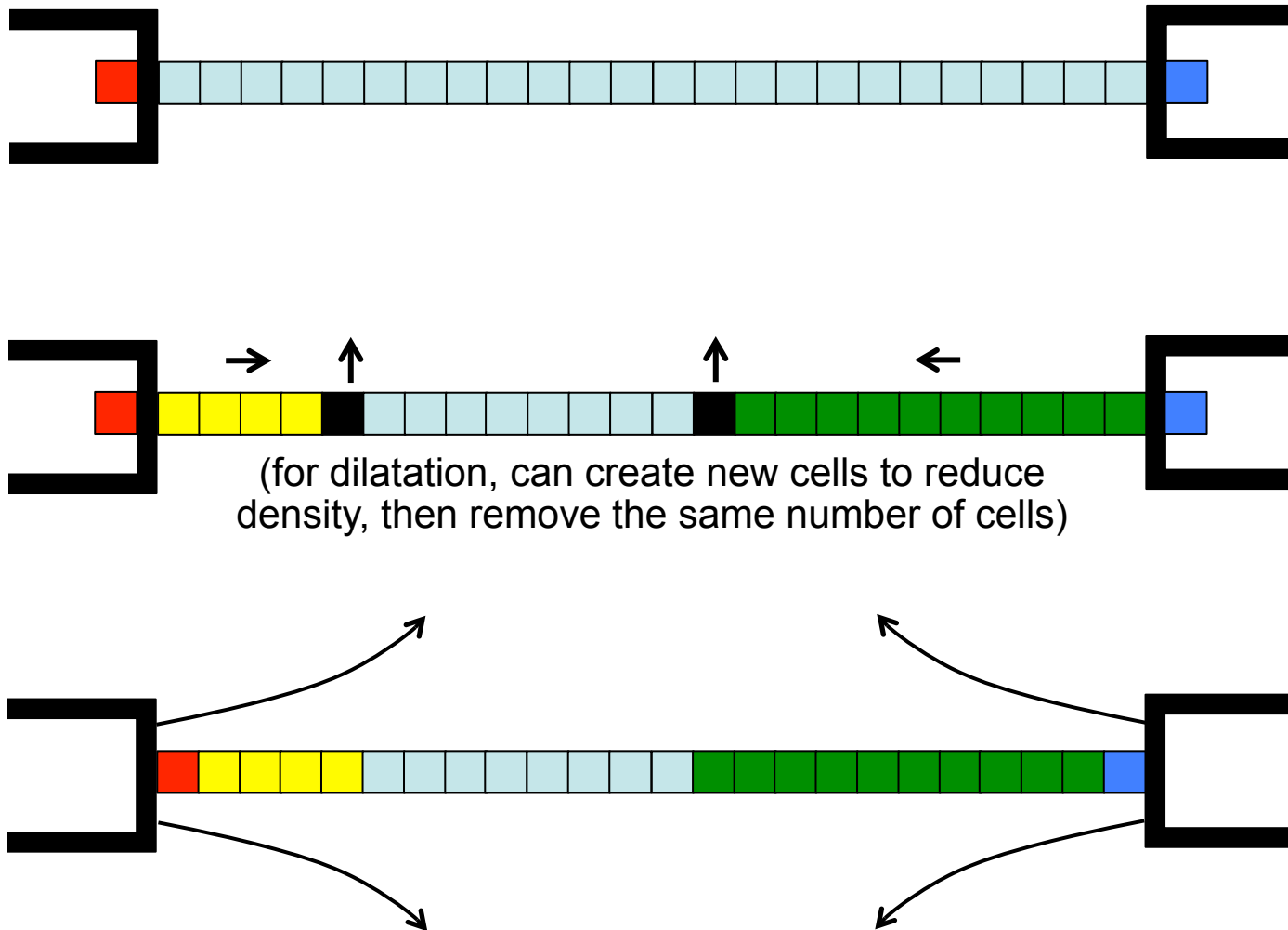
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MetStröm Short Course at BTU

Counter-flow flames can be modeled with either LEM or ODT

- LEM
 - Adjust model parameters to match cold flow conserved scalar (mixture fraction) statistics
 - Predict conserved and reacting scalars in flames
- ODT
 - Adjust model parameters to match cold flow velocity statistics
 - Predict velocity and scalar statistics in flames

For counter-flow flames (and some other cases)
the 1D domain is not a closed system



In ODT, the axial velocity component u can advect the flow along the domain x , determining du/dx

