SensPatankar with variable D

INRA\Olivier Vitrac – rev. 20/03/2015



General solution



On East side and by noting, :

 for 

Using the shorthand  leads to :

 for 

By noting the common flux at , , Eq. becomes:

 for 

Similarly on west side of the common interface one gets:

 for 

By enforcing the local thermodynamical condition at the common interface:



Which reorganizes as:



….

And finally as:



Global mass balance



Boundary condition (left) – node i=0 (liquid)



Boundary condition (left) d – node 1 (solid)

