InterPore2021



Contribution ID: 600

Type: Oral Presentation

Optimal Irrigation control in Richards Equation Framework

Friday, 4 June 2021 15:00 (15 minutes)

In this work we investigate a tool for optimizing the amount of water necessary for an efficient irrigation. In particular, we propose an optimal control approach for suitably handling top boundary conditions in Richards' equation, in a 1D spatial domain. The minimization problem of the given objective functional aims at optimizing the root water uptake term while minimizing the amount of water provided in the irrigation process.

Time Block Preference

Time Block B (14:00-17:00 CET)

References

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Student Poster Award

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Session Classification: MS25

Track Classification: (MS25) Subsurface Water Flow and Contaminant Transport Processes –Special Session in Honor of Harry Vereecken