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Bejan's heatline and massline visualization of multi-force effect on convection in a porous enclosure

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Highlights

- Convection in porous media under multiple interacting force fields has been investigated.
- Heatline and Massline visualization systems compliant with the multiphysics have been derived.
- The mathematical model comprising of tightly coupled nonlinear partial differential equations have been solved by GFEM and validated with literature.
- Physics of fluid flow, heat and mass transfer correlated to the multiple interacting forces influencing the transportation in a porous enclosure is elaborately detailed.

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