

## Braids and parabolic dynamics

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### **Abstract**

Solutions to scalar parabolic PDEs are regulated by a comparison principle which correlates the local dynamics of solutions to the curvature of their graphs. We show how lifting solutions to spaces of braids leads to a rich forcing theory for stationary and time-periodic solutions to parabolic PDEs, reminiscent of the “period-three-implies-chaos” results of Sharkovsky.