

$$\left(\frac{\partial}{\partial x}\right)^T = ?$$

**What is the *transpose*  
of a *derivative*?**

**And why should I *care*?**

**Find out in 18.303, Fall 2011**

*Linear Partial Differential Equations: Analysis & Numerics*

- Learn to view partial differential equations (PDEs) (examples: **waves** and **diffusion**) just like matrices
- How do 18.06 concepts like **transposes**, **eigenvalues**, and **null spaces** help us to understand linear PDEs?
- How do you turn PDEs into ordinary matrices to **solve them** on a computer?

*Prerequisite: 18.06 or equivalent*  
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