

– Fluid Flow through Porous Media –
a brief summary of my research

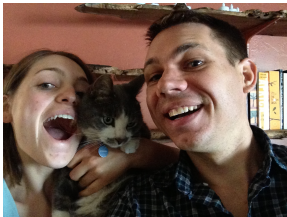
Colin Clark

June 5, 2013

Let's talk about me:



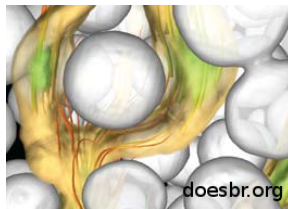
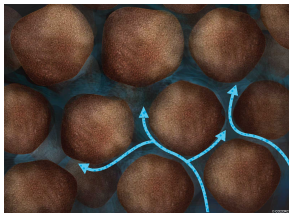
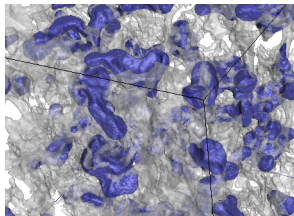
Let's talk about me:



Let's talk about coffee:



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Using words to describe how water flows:

- No net flow into any region
- All the forces pushing and pulling = mass $\times$ acceleration

And in symbols....

- $\nabla \cdot \mathbf{v} = 0$
- $\rho \frac{D\mathbf{v}}{Dt} = -\nabla p + \rho \mathbf{g} + \mu \nabla^2 \mathbf{v} - \frac{\mu}{k} \mathbf{v}$

Three pillars of investigation:



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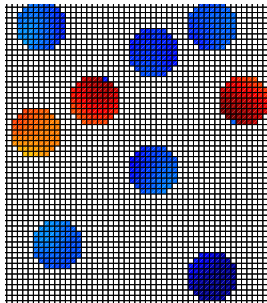
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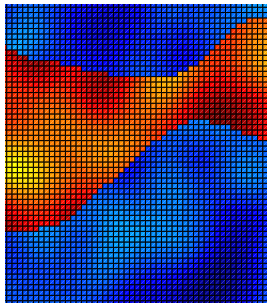
Motivating my research:



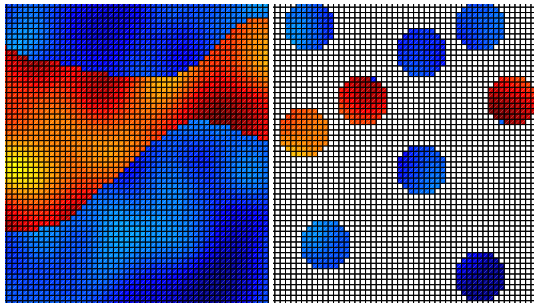
My research: Understanding how the geometry of geologic features affects overall flow patterns and hydraulic properties.



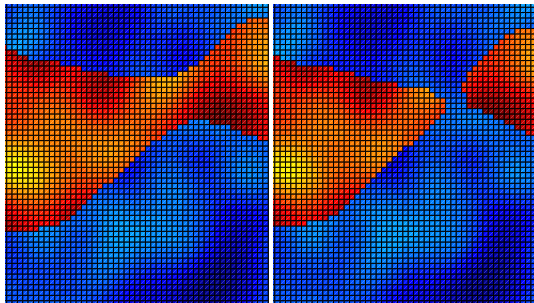
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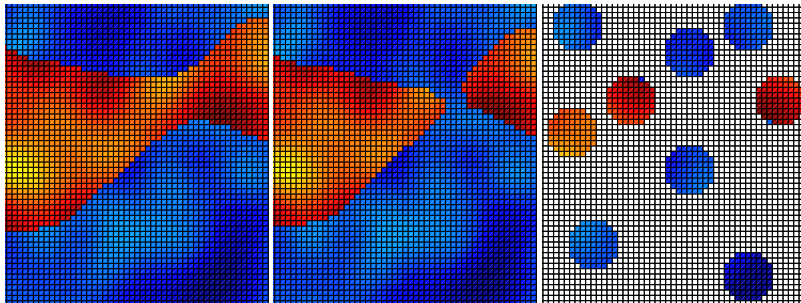
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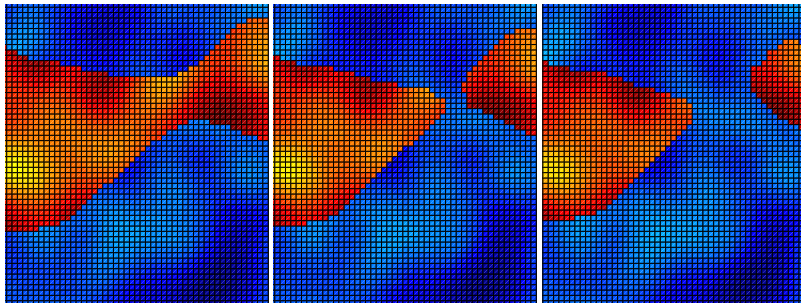
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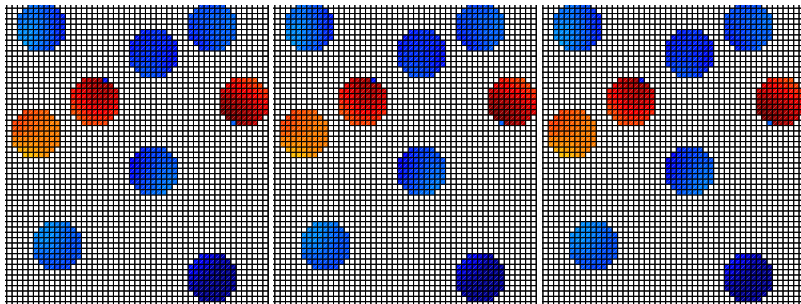
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