Recently the FDA approved a device for dynamic cardiac imaging that gathers data 15 times faster than before and another device that speeds up 3D brain imaging by a factor of 8. The speedup will allow more patients to be served at a lower cost per patient, giving US taxpayers a better return on the tens of billions of dollars in annual MRI charges. The presentation will tell the story of how US investment in basic research in the mathematical sciences led to this breakthrough.

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