

Animating Mathematics: GIFs Aren't Just for Cat Videos

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The animated GIF, which provided flashing lights and rotating "Under Construction" tackiness to the early web, has had an unlikely second life on social media. Aside from serving as a medium for sharing video while ducking the copyright cops, GIFs are embraced by a generation of abstract and geometric artists on Tumblr and elsewhere who have discovered beauty in short, looping animations.

My first GIFs were created to sanity-check algorithms and I have since used them in both the classroom and the seminar room, but I also now create mathematical animations that are purely artistic. In this talk I will share some of my GIFs and the (trivial and non-trivial) mathematics behind them. My work is produced in Mathematica with help from a couple command-line tools, so I will also try to impart some hard-earned lessons on how to use this combination to produce GIFs that (probably) won't make you want to claw out your eyeballs.