It’s not so much that it is “bad”, but that it is really good at a narrow set of use cases. Doing something like pow( x, 3.14 ) is a great use of the function, but pow(x,2.) isn’t.

When I am in C, I use:
#define SQR( x )       ( (x)*(x) )

It might have to calculate the argument twice, but then again, compiler optimizers try to find expressions in common and reduce them to one calculation.

When I am in C++, I use:
inline float SQR( float x )
{
    return x*x;
}

which gets around any potential inefficiencies with using the macro version.

I believe the explosion was real (also called a “practical effect”). This company https://www.kfxnyc.com/ was listed in the credits. Notice their opening description of themselves: Looking for big explosions, small explosions, bullet hits, fires, snow, rain, wind, insane car flips or any kind of custom rig or fabrication? Don’t try this at home - KFX has got you covered.

I agree with you there…

They are cool. Lots of noise, smoke, and flying metal chips. Typically they are called 5-axis – 3 translations and 2 spherical coordinate rotations. The rotation direction that is the whirling drill bit doesn’t count.

That’s a good way to describe subtractive versus additive manufacturing.
12:28:22   From  Arman H. : Materials are highly reusable in 3D printers right?

Sometimes yes, sometimes no. The powder-based systems can re-use what powder got laid down but not solidified, although you have to sieve the powder first to get all the little chips out of it. The extruded plastic systems don’t have a lot of unused material except for those support structures.

12:30:28   From  Haines, Grant A : The Coraline models were about 9-10 inches tall according to Google

Thanks for finding this.

12:39:01   From  Michael Zavalza : most slicers have a setting of what type/percentage of infill you use (I have 2 3d printers)

Good point. You can usually adjust the internal honeycombing to more favor strength or more favor lightweight.

12:52:32   From  Jacob Eckroth(He/him/his) : OSU has solidworks haha
12:52:48   From  Land, Hunter : but do we get access?

SolidWorks has an $89 student version: https://www.solidworks.com/product/students
Personally, I like IronCad better because it is easier to use. And, they have a free student version: https://www.ironcad.com/blog/free-ironcad-student-license/

13:33:23   From  McConnell, Jack : Would these office hours be an okay time to discuss a capstone project, or should we send you an email?

Either send an email, or wait until everyone in OHs has had a chance to ask class questions first.

13:41:26   From  Mahmoud, Ibrahim : there’s this too: https://www.youtube.com/watch?v=hyClpKAIFyo&ab_channel=AnimusicLLC

That’s one of the ones I was going to show on Monday!


Two Minute Papers also did a video on it: https://www.youtube.com/watch?v=i4KWiq3guRU

Cool! Thanks for finding this.
13:52:07 From Raymon, Nathaniel A: There's also a plugin for Unity called Nvidia Flex that does all sorts of cloth and fluid simulation.

13:53:32 From Michael Zavalza: are you still planning on doing a live lecture on blender at some point?
Yes, week #10.

Cool! Thanks for finding this.

14:34:56 From Yim, Ji Soo: check out the reviews on https://osu-cs-course-explorer.com/ for lots and lots of student povs

14:46:36 From Bailey, Mike: I was in a WebGL webinar this morning. If you're interested, here are the slides from it: https://drive.google.com/drive/folders/1T2U9rgPu6GdZZ9t56JiK3gbBnOR9qPUG