

# Re: This Week's Finds in Mathematical Physics (Week 266)

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On Jun 20, 10:54 pm, b...@xx (John Baez) wrote:

[...]

To set these in their proper perspective, it's good to recall the periodic table of  $n$ -categories, mentioned in "week49":

$k$ -tuply monoidal  $n$ -categories

$n = 0$   $n = 1$   $n = 2$

$k = 0$  sets categories 2-categories

$k = 1$  monoids monoidal monoidal categories 2-categories

$k = 2$  commutative braided braided monoids monoidal monoidal categories 2-categories

[...]

Holy Christ, this stuff makes my head spin.

Not being critical, quite the reverse – it's wonderful and awesome that so much can be constructed from such apparently meagre axioms, but is there some prospect that, broadly speaking, "closure" in some inductive sense will ever be achieved with all these concepts, or will they continue sprouting generalizations and ever higher abstractions ad infinitum?!

Also, does anyone know if Peter Johnstone is planning a revised (expanded?) edition of his "Sketches of an Elephant" volumes on topos theory? I heard a rumour to that effect, and have

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posponed buying the books for that reason.

(I was pleasantly surprised that Category Theory and Topos theory wasn't as much as a pons asinorum for me as I had feared it would be, and am quite getting into it now.)

Cheers

John Ramsden

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