Nightmare on Buccleuch Street.

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Staycation post No 4. I will be out of the virtual office until 30 August.

I haven't been into the university since the pandemic began but recently I dreamt that I was in the university library, in the section where magazines and journals are kept. In this dream, I was sitting at one of the low tables reading a magazine and two much younger men were also sitting there, in a suitably, socially distanced way. As they were unknown to me, I will call them A and B [1]. A was leafing through *The Physics of Fluids* while B was staring at one particular page of a tabloid newspaper.

After a while, A spoke. 'Have you seen that interesting article about constraints on the scaling exponents in the inertial range?'

B shakes his head and goes on studying his tabloid. A continues. 'These guys use Holder inequalities applied to the structure functions and then to the generalised structure functions; and end up with a condition relating the exponent for $S2$ to the exponent for $S3$. Now, if we assume that the exponent for $S3$ is equal to 1, then it follows that the exponent for $S2$ is equal to $2/3$. This is exciting. Most people would agree with the first of these, but not the second.'

B continues to stare at his newspaper and makes no response. With a slight note of desperation in his voice, A goes on. 'But don't you see, this could fit in nicely with Lundgren's matched asymptotic expansions analysis. It could also fit in with that guy's blog about the K62 correction being

unphysical. It looks like old Kolmogorov was right all the time … back in 1941. Aren't you interested, at all?'

At last B looks up. 'No, why should I be. I don't use structure functions or spectra in my work. And you will go on using Kolmogorov scaling as you have always done, because it works. So why are you so excited?'

For a moment A just sits there. The he gets up and puts the journal back in the rack. He stands in silence for a few moments. Then he says. 'You know, I keep feeling it's Thursday.'

For the first time B looks animated. 'That's funny so do I. Let's go and have a drink.'

Exeunt omnes. It was only a dream and obviously couldn't happen in real life. The paper to which A was referring is cited below as [2].

[1] There is no C in this story. See my post of 9 July 2020.
[2] L. Djenidi, R. A. Antonia, and S. L. Tang. Mathematical constraints on the scaling exponents in the inertial range of fl uid turbulence. Phys. Fluids, 33:031703, 2021.