

POST

I found it. In Bach. The missing foundation of environmental

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I found it. In Bach. The missing foundation of environmental superintelligence. Compression. Maximum compression with maximum logical depth.

???

Give me Bach and the Guadalupe River. Hide the axis labels.

I could not always tell them apart.

Neither can you. Neither can a spectrum analyzer.

Both are $1/f$.

So are heartbeat intervals. Neural firing. Stellar luminosity. Earthquake recurrence. Species abundance. Ocean floor elevation.

Everywhere a system sustains itself at a balance between energy in and entropy out, the same signature appears.

This is not coincidence. It is consequence.

Nature is compressible because its laws are short. Music is compressible because we are part of nature. Perception evolved to compress exactly this signature.

The mathematics of hearing a watershed correctly is the mathematics of hearing a fugue.

Read that again.

Which means three things the industry standard does not see:

One. Dispersion plumes are multifractal, not Gaussian. Gaussian closure cannot reproduce the structure real plumes exhibit.

Two. Watersheds carry eleven orders of magnitude of memory. Markovian hydrology models cannot see past the next lag.

Three. The standard environmental analytics stack is solving the wrong problem with the wrong mathematics. Not by a small margin. By construction.

The paper develops the right mathematics from first principles ... Shannon through Kolmogorov, Bekenstein, Bennett, and Friston. It lands on what we are building at EnviroAI: boundary-to-bulk inference under physically grounded priors for watersheds and airsheds.

No one else is building environmental AI this way because no one else has seen it this way.

It was in music.

Paper in first comment.

Original source: <https://www.linkedin.com/in/jedanderson432/> (April 22, 2026)

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