

Laboratory evidence of fractal and coherent structures in water.

Experimental results and theoretical understanding.

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I present a theoretical analysis of some measurements made by Vittorio Elia and his group in Naples on water in the presence of nafion, which exhibit fractal self-similar properties. By resorting to the theorem by which fractal self-similar properties may be described in terms of squeezed coherent states, it is argued that fractal self-similarity of the data obtained in the Elia's group measurements signals the presence of squeezed coherent structures in the molecular organization of water.