1106-37-2590 **Milan Stehlik*** (mlnstehlik@gmail.com), Casilla 110-V, Valparaíso, Chile. *Fractal dimension in abstract spaces.*

When we consider fractal based cancer diagnostic, many times a statistical procedure to assess the fractal dimension is needed. We shall look for some analytical tools for discrimination between cancer and healthy ranges of fractal dimensions of tissues (see [1], [2]). The algebraic and topologic properties are available via appropriate set structure, e.g. bornology (see [3,4]). The theory of lattice-valued bornological vector systems, which has been started in [4], makes another step towards development of a new technique for cancer research. Having a place for both geometric and algebraic information, bornological systems seem to us to be more suitable.

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