**The Gromov-Hausdorff Hyperspaces**

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The Gromov-Hausdorff distance $\mathrm{d_{GH}}$ was introduced by M. Gromov. It turns the set GH of all isometry classes of nonempty compact metric spaces into a metric space. Recall that for two compact metric spaces $X$ and $Y$, the number $\mathrm{d_{GH}(X, Y)}$ is defined to be the infimum of all Hausdorff distances $\mathrm{d_H}\big(\mathrm{i(X), j(Y)}\big)$ for all metric spaces $M$ and all isometric embeddings $i : X \hookrightarrow M$ and $j : Y \hookrightarrow M$.

For a given metric space $X$, the Gromov-Hausdorff hyperspace GH(X) is the subspace of GH consisting of the classes $[E] \in$ GH whose representative $E$ is a metric subspace of $X$.

In this talk we shall discuss the Gromov-Hausdorff hyperspaces $\mathrm{GH}(\mathbb{R}^n)$ and related spaces. In particular, we prove that $\mathrm{GH}([0, 1])$ is homeomorphic to the Hilbert cube, thus giving a positive answer to question 1307 from the book: E. Pearl (ed.), *Open problems in Topology II,* Elsevier, Amsterdam, 2007 (see the paper by T. Banakh, R. Cauty and M. Zarichnyi therein).