1. Problems that remain open (in some sense)

- Let X be a zero-dimensional space of weight τ. Is it true that 2^τ can be represented as the union of several pairwise disjoint subsets each of which is homeomorphic to X? ...of 2^τ many pairwise disjoint subsets each of which is homeomorphic to X?
- Say that X and Y are ω-equivalent if X^ω is homeomorphic to Y^ω. How many pairwise non ω-equivalent zero-dimensional Borel subsets of $\mathbb{R}$ are there?
- Can $\mathbb{Q}^\omega$ be condensed onto ω^ω? More generally, does there exist a "short" list $\mathcal{L}$ of Borel subsets of $\mathbb{R}$ such that for every borel set X, X^ω condenses onto L^ω for some $L \in \mathcal{L}$?
- [O. Okunev, Topology Atlas] Is it true that every zero dimensional space X can be condensed onto a zero dimensional space of weight equal to $iw(X)$?
- For what $(X, \mathcal{T})$, can one construct a bijection $f : X \to X$ such that the topology $\mathcal{T} \bigvee f(\mathcal{T})$ is discrete?