

CONDENSED MATHEMATICS

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One of the most basic notions in mathematics is the notion of a topological space, which formalizes the idea of a space with a notion “nearness” of points. First introduced by Hausdorff in 1914, it has become central in all areas of mathematics. However, in some respects the notion of topological space is not optimal; for example, it can not formalize the idea of “points that are infinitely near but distinct” in a useful way. In 2018, Dustin Clausen came to Bonn, and proposed a certain substitute for topological spaces that we termed condensed sets, and that overcomes these foundational issues. I will try to give an overview of these ideas.