La definició de connex: un viatge del contínu de Cantor a la definició moderna de Kelly

Natàlia Castellana

- "The point of this examination is to establish a precise criterion - but one that is simultaneously as generally applicable as possible - for designating P as a continuum."

  "A closed and bounded point set T is connected if for every two of its points t and t', and arbitrary given positive number ϵ, there always exists a finite number of points t_1, t_2, ..., t_n of T such that the distances tt_1, t_1t_2,...., t_nt' are smaller than ϵ."

  Georg Cantor, Uber die Ausdehnung eines Satzes aus der Theorie der trigonometrischen Reihen, Math. Ann., 5(1):123-132, **1872**.

- "Let E, E' be two closed sets with no point in common. The distance between the various points p in E to the various points p' in E' form a set of nonnegative numbers. It is therefore bounded below, and it admits a minimum Δ, positive or 0, we call the distance between the sets E, E'. If the distance is greater than 0, we say that the sets E, E' are separated."

  "We say that a closed and bounded set E is a component if it cannot decompose into several separated sets."

  Camille Jordan, Cours d'analyse (Course on Analysis). vol. 1, **1893**.

- "A perfect set T is called connected if it can not be decomposed into subsets, each of which is perfect."

  Arthur Moritz Schoenflies, Beitrage zur Theorie der Punktmengen I. Math. Ann., 58:195-238, **1904**.

- "A set of points is a connected set if at least one of any two complementary subsets contains a limit point of points in the other set."

  Nels Johann Lennes, Curves in Non-Metrical Analysis Situs with an Application in the Calculus of Variations. Amer. J. Math., 33(1-4):287-326, **1911**.

- "A topological space is connected iff X is not the union of two non-void separated open subsets."

  John L. Kelley, General topology. Springer-Verlag, New York, 1975. Reprint of the **1955** edition [Van Nostrand, Toronto, Ont.], Graduate Texts in Mathematics, No. 27.