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*Cofinite groupoids and their profinite completions.*

Cofinite graphs and groupoids are defined in a unified way extending the notion of cofinite group introduced by Hartley. These objects have in common an underlying structure of a directed graph endowed with a certain type of uniform structure, called a cofinite uniformity. Much of the theory of cofinite directed graphs turns out to be completely analogous to that of cofinite groups. For instance, the completion of a directed graph  $\Gamma$  with respect to a cofinite uniformity is a profinite directed graph and the cofinite structures on  $\Gamma$  determine and distinguish all the profinite directed graphs that contain  $\Gamma$  as a dense sub-directed graph. The completion of the underlying directed graph of a cofinite graph or cofinite groupoid is observed to often admit a natural structure of a profinite graph or profinite groupoid, respectively. (Received September 22, 2018)