filtration

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A *filtration* is a sequence of sets $A_1, A_2, \ldots, A_n$ with

$$A_1 \subset A_2 \subset \cdots \subset A_n.$$

If one considers the sets $A_1, \ldots, A_n$ as elements of a larger set which are partially ordered by inclusion, then a filtration is simply a finite chain with respect to this partial ordering. It should be noted that in some contexts the word "filtration" may also be employed to describe an infinite chain.