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wedge product of pointed topological spaces

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Definition. Let $\{(X_i, x_i)\}_{i \in I}$ be a finite family of disjoint pointed topological spaces. The *wedge product* of these spaces is

$$\bigvee_{i \in I} X_i = \left(\bigcup_{i \in I} X_i \right) / \{x_i : i \in I\}.$$

This can be generalized to arbitrary families of pointed topological spaces, although this may require that the topology on $\bigcup_{i \in I} X_i$ satisfy a coherence condition (see [?]).

References

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- [3] Shick, P. L. (2007). *Topology: Point-set and geometric*. Hoboken, NJ: John Wiley & Sons.