product of uniform spaces

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Definition. Let $\{X_\alpha\}_{\alpha \in I}$ be a nonempty family of uniform spaces. The is the http://planetmath.org/UniformitiesOnASetFormACompleteLattice weakest uniformity on the Cartesian product $X = \prod_{\alpha \in I} X_\alpha$ making all the projection maps $\pi_\alpha \colon X \to X_\alpha$ uniformly continuous.