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Vladimir Troitsky* (troitsky@ualberta.ca). *Tensor products of concavifications of Banach and vector lattices*. Preliminary report.

Let E be an Archimedean vector lattice or a Banach lattice. We consider the Fremlin projective tensor product of E with itself. The members of the order ideal generated by elements of form $x \otimes y$ where $x \perp y$ are viewed as off-diagonal. The quotient of the tensor square with respect to this ideal can be viewed as the diagonal of the tensor square. We show that this diagonal can be identified with the 2-concavification of E . Furthermore, we extend this result to the tensor product of several concavifications of E : we show that the diagonal of such a product is again a concavification of E . The talk is based on joint projects with Q.Bu, G.Buskes, A.Popov, and A.Tcaciuc and with O.Zabeti. (Received November 08, 2012)