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PK-5151, Montréal, Québec Qc H3C 3P8, Canada. *A general bar-cobar duality*. Preliminary  
report.

We extend Sweedler's theory of algebras and coalgebras to operads and cooperads. We show for that the category of cooperads is symmetric monoidal closed and that the category of operads is enriched over it. This is true generally for operads and cooperads enriched in any symmetric monoidal locally presentable category, and in particular for differential graded operads and cooperads. We then formulate the bar-cobar duality for operads and cooperads in this setting. (Received September 22, 2011)