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Ciprian Manolescu, Marco Marengon, Sucharit Sarkar and Michael Willis*
([msw188@g.ucla.edu](mailto:mw188@g.ucla.edu)), 520 Portola Plaza, Los Angeles, CA 90095-0001. *Generalising Rasmussen's s-invariant. Part 1: Definition and basic properties.*

Previous work of Rozansky and of the author led to the construction of a Khovanov complex for links in connected sums of copies of $S^1 \times S^2$. We introduce a Lee deformation of this complex, allowing for a definition of an s -invariant for null-homologous links in such 3-manifolds. We discuss the behavior of the s -invariant under cobordisms. We also introduce a re-formulation in $S^1 \times S^2$, closer in spirit to Rozansky's original definition of the Khovanov complex, which allows us to make an important computation for a specific set of links. This is joint work with Ciprian Manolescu, Marco Marengon, and Sucharit Sarkar. (Received November 25, 2019)