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Itamar Stein* (steinita@gmail.com). *The ordinary quiver of the algebra of the monoid of all partial functions on a set.*

One of the goals of the study of monoid representations, is to relate them to the modern representation theory of associative algebras. An important invariant of an associative algebra A is its (ordinary) quiver, a graph that contains information about the algebra's representations. Hence, given a monoid M it is of interest to find the quiver of its algebra $\mathbb{C}M$. We will give a description of the quiver of PT_n , the monoid of all partial functions on n elements. Our description uses an isomorphism between $\mathbb{C}PT_n$ and a certain category algebra, which is an extension of a well known isomorphism of the algebra of IS_n (the monoid of all partial 1-1 maps on a set) and the algebra of the groupoid of all bijections between subsets of a set. The quiver of the category algebra is described using results of Stuart Margolis, Ben Steinberg and Liping Li on the quiver of EI-categories. (Received February 10, 2015)