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Yue Cai* (ycai@math.tamu.edu) and **Catherine H. Yan.** *Rational parking functions.* Preliminary report.

The classical parking functions, enumerated by $(n+1)^{n-1}$, is the set of all sequences $(a_1, \dots, a_n) \in [n]^n$ whose increasing rearrangement $b_1 \leq b_2 \leq \dots \leq b_n$ satisfies $b_i \leq i$. In this talk, we will introduce the notion of rational parking functions indexed by a pair of coprime integers (a, b) . We will present some enumerative results on the rational parking functions and discuss the more general case where $\gcd(a, b) \neq 1$. (Received September 20, 2018)