Pere Ara* (para@mat.uab.cat), Departament de Matematiques, Edifici C, Universitat Autonoma de Barcelona, 08193 Bellaterra, Barcelona, Spain, and Kenneth R. Goodearl (goodearl@math.ucsb.edu), Department of Mathematics, University of California, Santa Barbara, CA 93106. Leavitt path algebras and graph C*-algebras of separated graphs, I. Preliminary report.

A separated graph $(E, C)$ is a pair consisting of a directed graph $E$ and a family $C$ that gives partitions of the set of edges departing from each vertex of $E$. In joint work with K.R. Goodearl, we have introduced and investigated several algebras and C*-algebras associated to a separated graph $(E, C)$. I will recall the main definitions and give several interesting examples. One of these examples is closely related to the Leavitt algebras $L(m, n)$ with $1 \leq m \leq n$. (Received September 17, 2009)