1056-16-943   **Gene Abrams*** (`abrams@math.uccs.edu`), Department of Mathematics, University of Colorado, Colorado Springs, CO 80918, and **Mark Tomforde**. *Isomorphism and Morita equivalence of graph algebras II.* Preliminary report.

In this talk we continue the discussion of various relationships between the Leavitt path algebra $L_{\mathbb{C}}(E)$ and graph C*-algebra $C^*(E)$ begun in Mark Tomforde's talk. In addition to furthering the description of situations in which ring isomorphisms between $L_{\mathbb{C}}(E)$ and $L_{\mathbb{C}}(F)$ yield *-algebra isomorphisms between $C^*(E)$ and $C^*(F)$, we present specific cases for which we get the reverse implication as well. The Kirchberg Phillips classification theorem, along with corresponding cases of its algebraic counterpart, play an important role here. Similar relationships in the context of Morita equivalences will also be described.

In the final portion of the talk we will present a number of perhaps surprising, still-not-completely-understood results of the form: $L_{\mathbb{C}}(E)$ satisfies ring-theoretic property $\mathcal{P}$ if and only if $C^*(E)$ satisfies ring-theoretic property $\mathcal{P}$ if and only if $C^*(E)$ satisfies the appropriate analytic property analogous to $\mathcal{P}$. (Received September 18, 2009)