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College Park, MD 20742. *Birational Induction of Nilpotent Orbits*. Preliminary report.

Every nilpotent orbit of a complex reductive group may be uniquely realized as "saturated" from a "distinguished" orbit on a Levi factor (this is the Bala-Carter classification).

Alternatively, every orbit may be realized as induced from a rigid orbit on a Levi factor. However this realization is not unique. This can be improved: every orbit may be uniquely realized as "birationally induced" from a "birationally rigid" orbit. With this change there is a nice duality relationship with the Bala-Carter classification.

One of the difficulties in understanding the unitary dual is the fact that, similar to the situation for orbits, a representation may be induced in multiple ways. It turns out that, using the representation/orbit principle, restricting to birational induction of orbits plays a role in understanding the unitary dual. In joint work with Dan Barbasch I use this to organize the spherical unitary dual. (Received June 25, 2011)