

## A New Classification Scheme of Blue Compact Dwarf Galaxies

성언창<sup>1</sup>, 천문석<sup>2</sup>, Ken Freeman<sup>3</sup>

<sup>1</sup>한국천문연구원

<sup>2</sup>연세대학교

<sup>2</sup>RSAA, ANU

We present a new classification scheme of blue compact dwarf galaxies based on environmental criteria from our extensive observations for a homogeneous sample of blue compact dwarf galaxies. On the base of their environmental properties derived from optical, near infrared, and HI observations, BCDGs are classified into four groups; the isolated, the post-merger, the detached interacting, and the merger-in-progress. We found that although BCDGs have well-shaped outer envelopes and the similar inner structure, their physical natures including the evolutionary status and the origin of starburst triggers are very different galaxy by galaxy.