

DESIGN, STATUS AND PRELIMINARY DATA FROM THE WIDE ANGLE
CHERENKOV TELESCOPE ARRAY AT MILAGRO

R. Atkins(1), W. Benbow(2), D. Coyne(2), B. Dingus(1), J. Goodman(3), T. Haines(4),
C. Hoffman(4), J. McEnery(1), G. Mohanty(5), F. Samuelson(4), G. Sennis(4),
T. Stephens(6), S. Stochaj(7), T. Tumer(5), D. Williams(2), G. Yodh(8)

(1) Department of Physics, University of Wisconsin, Madison, WI 53706, USA

(2) Santa Cruz Institute for Particle Physics, University of California, Santa Cruz,
CA 95064, USA

(3) Department of Physics, University of Maryland, College Park, MD 20742, USA

(4) Los Alamos National Laboratory, Los Alamos, NM 87545, USA

(5) Institute of Geophysics and Planetary Physics, University of California,
Riverside, CA 95521, USA

(6) Department of Astronomy, New Mexico State University, Las Cruces, NM
88003, USA

(7) Department of Electrical and Computer Engineering, New Mexico State
University, Las Cruces, NM 88003, USA

(8) Department of Physics and Astronomy, University of California, Irvine, CA
92697, USA

WACT is an array of six wide angle Cherenkov telescopes located in the Jemez mountains of New Mexico, around the Milagro gamma-ray observatory. The primary physics goal of WACT is to measure cosmic ray composition from low energies ~ 50 TeV, up to energies beyond the knee. This is accomplished by making measurements of the Cherenkov Lateral Distribution (CLD). Measurements at low energies can provide overlap with direct measurements. Design and status of WACT will be presented as well as preliminary data taken in an engineering mode