

**CAP 2004 CONGRESS / CONGRÈS ACP 2004**  
**PROGRAM CHANGES / CHANGEMENTS AU PROGRAMME**  
(As at June 9 - au 9 juin)

**MONDAY, JUNE 14 / LUNDI LE 14 JUIN**

**Pages 37 & 66 - MO-A7-6 (11h15)** - The presentation by M. Singh has been changed to poster MO-POS-152 (will be on display between MO-POS-95 and MO-POS-96) and replaced by a 15 minute break.

**Page 127 - MO-POS-5** - The poster by M. Fich is now TU-A6-1. MO-POS-67 will become MO-POS-5.

**Page 129 - MO-POS-25** - The poster by A. Crouch has been withdrawn.

**Page 133 - MO-POS-63** - The poster by C. MacTavish has been withdrawn.

**Page 134 - MO-POS-150** - The following is an additional poster (will be on display between MO-POS-68 and MO-POS-69):

The Creation of a Tidal Stream in NGC 5128 Through Galaxy Mergers, Joanne Hosick, J. Wadsley and W.E. Harris, *McMaster University* — Observations of the giant elliptical galaxy NGC 5128 (Centaurus A) show evidence of a blue tidal stream likely caused by a merger with a gas-rich dwarf irregular galaxy. A possible proto-globular cluster has been identified with the stream providing further evidence of the role mergers have in developing new clusters. We use high resolution simulations to study the effect of gravitational potential and dwarf size on stream formation. We find for a static potential primary galaxy a dwarf with a small dark matter to luminous matter ratio is required in order to create a suitable sized stream. Further testing will include a dynamic model of the primary galaxy to investigate the effects of dynamical friction.

**Page 138 - MO-POS-151** - The following is an additional poster (will be on display between MO-POS-102 and MO-POS-103):

Polymer Liquid Crystals Composite Systems for Lens Application and Scattering Polarizer, Vladimir Presniakov<sup>1</sup> and Tigran Galstian<sup>1,2</sup>, <sup>1</sup>*Université Laval* and <sup>2</sup>*Phototech.com* — Polymer networks dispersed in liquid crystals (LC) are usually used to stabilize and to control the LC orientation in the cell. We develop new optical techniques to create polymer-stabilized nematic LC with specific electro-optical properties which can be adapted for the following applications: (1) tunable focus lens. The idea of lens fabrication is based on photo-induced curing of a polymer/liquid crystals mixture with Gaussian shaped laser beam to produce a spatially inhomogeneous polymer network formation. Applying a uniform voltage to the non-pixelated cell leads to circular-symmetric (lens-like) distribution of refractive index in the cell. Focal length of such lens is tunable by voltage; (2) electrically controlled light polarizer. The polarizer is based on nematic LC stabilized by flexible polymer chains and is operated at normal mode: it reveals anisotropic scattering state at zero voltage and transparent one under applied voltage (in contrast to reverse-mode polarizer by use the traditional cross-linking polymer network). Such polarizer does not absorb light and is capable of working in a wide spectral range - visible and near infrared.

**Page 143 - MO-POS-132** - The poster by J.M. Martinez-Ortega has been withdrawn.

**TUESDAY, JUNE 15 / MARDI LE 15 JUIN**

**Pages 41 & 82 TU-A4-1 (08h30)** - The ALMA talk will be given by Christine Wilson, McMaster University.

**Pages 43 & 83 TU-A6 (9h15):** The News from Space session will be chaired by Christine Wilson, McMaster University.

**Pages 43 & 83 TU-A6-1 (9h15)** - The ODIN talk will be given by Michel Fich, University of Waterloo and will be entitled "Recent Results from the Odin Satellite" (formerly MO-POS-5).

**(12h30 - 13h30)** - News Conference in Kildonan room at the Delta Hotel.

**Pages 44 & 89 - TU-A13-5 (11h30)** - The talk by K. Vos has been moved to 11h30. The coffee break will be from 11:00-11:30 following a brief announcement. The presentation by B. Statt has been cancelled..

**Pages 47 & 97 - TU-P6-4 (16h00)** - The presentation by A. Datta has been withdrawn. R. Dick's talk will now start at 16h00.

**WEDNESDAY, JUNE 16 / MERCREDI LE 16 JUIN**

**Pages 50 & 111 - WE-A13-3 (11h00)** - The presentation by Don Page has been changed to the following:

The Lifetime of the Universe

Lower and upper limits of the future lifetime of our universe are derived from current observations. WMAP data combined with the assumption of a non-convex scalar field potential driving the current acceleration of the universe gives a lower limit of 26 billion years for the future lifetime. On the other hand, observations of order rather than of vacuum fluctuations, combined with the assumption that observers are finite, give an upper limit of  $10^{60}$  years if the current acceleration persists during that time, and higher upper limits if the acceleration ends.

**Pages 55 & 124 - WE-P12 (15h30):** the Radiation Treatment Verification session will be chaired by Peter O'Brien, Sunnybrook, University of Toronto.