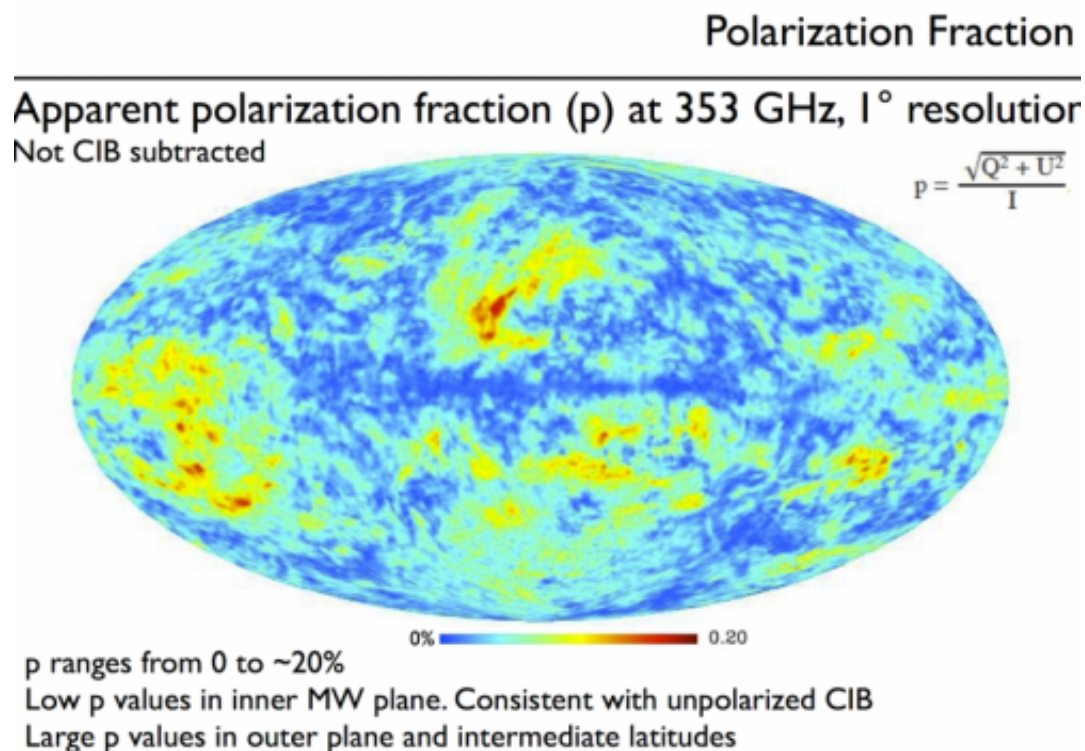


Blogger claims BICEP2 team acknowledging possible error in discovery of evidence of gravitational waves

May 14 2014, by Bob Yirka



Bernard J. Ph., ESLAB 2013 6

(Phys.org) —Adam Falkowski, a physicist working at CERN, on his [Particle Physics Blog](#), is claiming that researchers on the BICEP2 team that uploaded a paper ([First direct evidence of cosmic inflation](#)) to the

[arXiv](#) preprint server this past March have acknowledged to some in the science community that there may be a problem with their methodology. Members of the BICEP2 research team are denying Falkowski's claim, but the assertion has led to rumors on the Internet that the team may not have found evidence of cosmic inflation after all.

The Big Bang theory suggests the universe as we know it came to exist as the result of a giant explosion, approximately 14 billion years ago, followed by a rapid thrusting of material from the point of the explosion out into what we now observe as the universe around us. That thrusting has been dubbed the theory of [cosmic inflation](#)—it describes the rapid expansion of the universe. Adherents contend that during the initial phase of cosmic inflation, [gravitational waves](#) would have been generated, and should be still visible today. Last March, the BICEP2 team claimed in their paper that they had found evidence of such gravitational waves, giving cosmic inflation theory a huge boost.

But now, some have suggested that there might have been a problem with the way the observations were made—a map the team used which was created by the ESA's Planck team might have been interpreted incorrectly. To spot gravitational waves, the team had to rule out other signals it received based on data from a variety of sources. One of those sources, the map created by the Planck team included several possible sources of light, but the researchers at BICEP2 thought it only charted dust or ashes from exploding stars. This bit of news leads to a little bit of doubt about the results the team found, and now places them at the mercy of an update of the map by the Planck team.

In the meantime, members of the BICEP2 team have been responding to the rumors and claim they are still confident in their results and that any gossip suggesting they have begun to doubt their work is wrong. Whether they believe their work is in jeopardy or not, is, of course, not really what's important—finding out if what they reported is correct is what

matters, and that is going to take some time.

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