

Colorado

CAFÉ SCIENTIFIQUE

Tuesday 7 May 2013

at the Wynkoop Brewing Company

<http://www.wynkoop.com/>

Corner of 18th and Wynkoop in LoDo, Denver

About a block from Light Rail. Thirteen minutes by foot from Auraria.

100 YEAR STARSHIP: GETTING READY TO TRAVEL TO THE STARS!

Alires Almon, MA

Orchestrator of Engagement, 100 Year Starship, Denver

In May 2012 DARPA announced an award of \$500,000 to the Dorothy Jemison Foundation for Excellence to launch the 100 Year Starship Project, to begin the discussions and planning that would one day pave the way for humanity's most audacious undertaking: sending humans to the nearest star. Now such a trip is hardly trivial: Proxima Centauri is 4 light years away, or about 25 trillion miles. Our farthest spacecraft, Voyager 1, is travelling at 1/18,000 the speed of light; a starship at that rate would take 72,000 years to reach Proxima Centauri. This brings up all sorts of issues: Do you send live people, whose descendants will reach the star? What will they be like—humans on Earth have only a 10,000 year history. How do you get enough genetic variability to sustain people over that long a time? Or should they be put in suspended animation, as they do in science fiction? Or send frozen sperm and eggs? Or just a human genome map, with instructions on how to create humans from it?

The questions are really interesting to consider. Almost every field of human endeavor could be consulted: what art would they take? What music? Who would go? And of course, how would their mental and physical health stand up to such a long voyage? Every possible question is welcome at the Café!

EVERYONE IS WELCOME. The discussion starts at 6:30 in the Mercantile Room (no food service there). Come before 6 PM to leave yourself time to get something to eat, or stay and eat afterwards. We end around 8 PM.

There's no charge. The Wynkoop is generously providing the facility; we buy our own drinks. It is first come, first seated, and **seating is limited** so that everyone can take part in the discussion.

The Colorado Café Scientifique is organized by an informal group of faculty from CU and institutions up and down the Front Range, as well as science fans from industry, government and elsewhere. We welcome your input, including ideas for speakers and topics. Bring them with you to the next Café, or e-mail them and any questions to John.Cohen@UCDenver.edu

**Essential information about the topic and the event on our Web site at:
CafeSciColorado.org**