

CONTACT's Program at OryCon44

(schedule subject to change)

Friday, October 18

1:00 PM

Science Fiction, Science Fact: Teaching at the Intersection of Science Fiction and Radio Astronomy

Jay Cole

This presentation will recap my experience teaching an undergraduate honors seminar about the intersection of science fiction and radio astronomy in books and films. This presentation will also invite discussion and ideas about expanding curricular opportunities on this exciting topic.

2:00 PM

The Capthraw - Ancient Bird Lizards

Gus Frederick

WTF were the Capthraw? An elaborate work of my personal imagination; noodling over what if there were other technological civilizations that had popped up over the millions of years of this planet's history? This is a thought experiment which assesses modern science's ability to detect evidence of a prior advanced civilizations, millions of years ago. This will be a presentation regarding my own thoughts on this concept, as the basis of a potential future story.

3:00 – 5:00 PM

Introduction to COTI: Cultures of the imagination

Israel Zuckerman

How does COTI work? Are there rules? Guidelines? What is involved in constructing a world and its ecology, an intelligent native life form and its culture, basing each step on the previous one and utilizing the principles of science as a guide to imagination. This session is a prerequisite to the ones on Friday and Saturday.

7:00 – 10:00 PM

COTI Cultures of the Imagination Alien Development – PART 1 of 3

Israel Zuckerman

Participants will begin to design an integrated world, alien and its way of life. They will construct a world and its ecology, an intelligent native life form and its culture, basing each step on the previous one and utilizing the principles of science as a guide to imagination. They will finish this design at the Saturday session and conclude on Sunday in a live action roleplay of the meeting of two alien cultures.

Saturday, October 19

9:00 AM

Zylerium Blindness: A Cold War Science Fiction Case Study in Comprehensive Design

William J. Clancey

"Zylerium Blindness" is a short story written during the Cold War about how nuclear explosions created an element, Zylerium, causing global congenital blindness. Authored by Thomas B. Sheridan and John E. Arnold, pioneers in "design thinking" and "human engineering," this case study for students demonstrates the methods and challenges of "comprehensive design." Humanity must deal with groupthink and social conformity, which inhibit personal integrity, responsibility, and imagination and thus impair creative problem solving.

10:00 AM

Metalaw in Anthropology and Cultural Futures – Where Are We in 2024?

Robert N. Tyzzer

Metalaw developed about 60 years ago as a proposed legal system that would serve to mediate contacts between any and all intelligent species, whether on Earth or elsewhere in the universe. This talk will discuss the current status of Metalaw, including Haley's Rule, within the social sciences, speculative fiction and, increasingly, SETI.

11:00 AM

SETI Observables of Interstellar Beam Propulsion Systems

G. David Nordley

What would the operation of beam-driven interstellar propulsion systems look like to observers on other stars? If it's coming right at you, you might see the beam, as in *The Mote in Gods Eye*, but if we assume many starships departing in random directions, the originating star system might look like it were surrounded by a faint halo, about a light year in radius. Why, and how to look for it will be explained.

12:00 PM

Interoperability for Human Expansion into Space

Panel Discussion with Hugh Gregory, Dan Dubrick, G. David Nordley

Compatibility between space systems of different countries and different contractors seems like a no-brainer of emergency planning, but Boeing astronauts can't go back in SpaceX capsules, let alone Russian, Chinese, or whatever future Indian, ESA, and others might use. We do have an international docking adaptor, but that's only a first step. Can we evolve international standards to make this better and safer?

2:00 PM

Overview of CONTACT's Epona

Greg Barr, Wolf Read, and G. David Nordley

In 1993 an international team, headed by Martyn Fogg and Greg Barr, embarked upon a three-year project that produced a wondrously rich and exotic extraterrestrial world, Epona. Larry Niven remarked "... I've never seen a playground this size!" Three of the participants will review this CONTACT project and some of its spin-offs.

3:00 PM

Building a Carrying Capacity Model for the Solar Ecosystem and Examining a Technique to Encapsulate an Asteroid to Build Almost Anything in Space

Greg Barr

Imagining big, how large a population could the Solar System support? There are models, as Greg Barr will explain. One way to build a world-ship might be to encapsulate an appropriate asteroid with all the resources, and reaction mass, to sustain an interstellar journey, or settle the outer reaches of the solar system. We'll explore Dr. Bruce Damer's Secure Handling by

Encapsulation of a Planetesimal (SHEP) concept.

4:00 PM

Transport of Life and Biosignatures Across the Solar System and Beyond

P.J. Boston

What interplanetary and interstellar mechanisms exist that could transport microbial or other lifeforms across our Solar System or between systems, and what are the limits to survivability for organisms hitching a ride from one planetary body to another?

With recent identification of interstellar objects observed passing through our system, speculations about cross-fertilization between Earth and Mars, and the prospects for ancient Earth life biosignatures to be found on the Moon, it is fruitful to take a hard look at the destructive and protective factors that such space-going organisms and their traces will face. What can we really expect to find, and how do we rigorously investigate these intriguing possibilities?

7:00 – 10:00 PM

COTI Cultures of the Imagination Alien Development – PART 2 of 3

Israel Zuckerman

Participants will begin to design an integrated world, alien and its way of life. They will construct a world and its ecology, an intelligent native life form and its culture, basing each step on the previous one and utilizing the principles of science as a guide to imagination. They will finish this design at the Saturday session and conclude on Sunday in a live action roleplay of the meeting of the two alien cultures.

Sunday, October 20

9:30 – 11:00 AM

COTI Cultures of the Imagination CONTACT: Aliens and Humans Meet – PART 3 of 3

Israel Zuckerman

The two alien cultures meet in improve roleplay of alien contact. Finally, through a structured system of progressive, real-time revelation, the teams simulate -- and experience through unrehearsed roleplaying -- contact between the two cultures, in order to explore the problems and possibilities involved in inter-cultural encounters.