Science vs. Cinema

UC Santa Barbara astrophysicist Andy Howell is a self-proclaimed film geek.

In his spare time, the staff scientist at the Las Cumbres Observatory reviews films for Ain’t It Cool News, a website dedicated to the best in TV, DVDs and comic books. But that's not all. Howell also stars in the YouTube series called “Science vs. Cinema,” which he produces with alumnus James Darling. The series looks at the science in cinema and separates fact from fiction.

“T’ve always had one foot in the movie world and one foot in the science world, so this is just the marriage of those two things,” said Howell, who is also an adjunct faculty member in UCSB’s Department of Physics. “When you talk about movies, you can reach a much broader audience and sneak some science in.”

The current episode of “Science vs. Cinema” examines “Arrival,” the recently released film starring Amy Adams and Jeremy Renner. The plot centers around the efforts of linguistics professor Louise Banks (Adams) to find a way to communicate with extraterrestrial visitors.

According to Howell, “Arrival” largely got the science right, despite the fact that humans don’t have any actual experience with which to make comparisons.

“People think you have to choose between a movie being a blockbuster and getting the science right,” Howell said. “But my point of view is that you can get the science right and still have an entertaining movie. And it often helps make a more entertaining movie. If you need to bend the rules to tell a better story, that’s fine.
You get certain miracle exceptions for the conceit of the movie, but get the details right and be consistent.”

For the “Arrival” episode, Howell and Darling were assisted by Chris Jenkins, a lecturer in film and media studies, and Johnny Rafter, a former student of Jenkins who did some of the camera work.

In the inaugural episode of “Science vs. Cinema,” Howell evaluated the science behind “The Martian” starring Matt Damon.

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.