

## The *Hubblecast* — The world's first full HD video podcast?

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Figure 1 – The Hubblecast Full HD logo



Figure 2 – Hubblecast host Dr. J.

Credit: ESA/Hubble

### Abstract

In March 2007 the ESA/Hubble office of the Space Telescope European Coordinating Facility in Garching, Germany, embarked on the production of a video podcast; a production that aimed to reach out to a diverse and to some extent untapped audience in astronomy. The result would be *The Hubblecast*, a six-minute long video podcast. *The Hubblecast* would make use of the surge in popular on demand media to grab the attention of many who might have never come across Hubble's work. The aim was to explain the science and workings of the NASA/ESA Hubble Space Telescope through the use of animations and commentary alongside high resolution Hubble images. Today the *Hubblecast* is produced in Full High Definition, possibly making it the world's first Full HD video podcast. Today with well over 1 million downloaded episodes so far the *Hubblecast* is going from strength to strength as one of the most popular science vodcasts in the world.

## Introduction

Video Podcasting, or “Vodcasting”, is the latest evolution of the video on demand revolution of the past few years. Now on demand content is shifting from solely headphones and portable devices to computers, televisions and even portable video players. The appeal of accessing video content at will is growing and seems especially attractive to the young demographic segment; a demographic segment which science communicators are keen to enthuse, engage and inform. Inspired by other leading science vodcast producers, such as the Spitzer Science Center’s Robert Hurt (*Hidden Universe*<sup>1</sup>), The ESA/Hubble communication office in Garching was eager not to be left behind in this new revolution. So, in March of 2007 the first Hubblecast went online on the spacetelescope.org website<sup>2</sup>. By the end of March the brand new vodcast had been downloaded over 10,000 times. It was a great start.

## Production

The *Hubblecast* is presented by Dr. Joe Liske from ESO. Hubblecast viewers will know him by his on-screen alias of Dr. J. Dr. J was cast from a group of ten scientists, both male and female, all excellent candidates for the job with a variety of backgrounds. Today Dr. J. receives fan mail on his MySpace page<sup>3</sup> and continues to front the ever expanding vodcast.



Figure 3 – Dr. J with narrator Bob Fosbury in the studio.

Each vodcast lasts approximately five or six minutes and takes only about five days to film, edit and produce an episode; including the writing, refining and checking of the script. Each episode usually begins with a morning’s filming at the Peter Rixner Studio<sup>4</sup> outside Munich in the foothills

<sup>1</sup> <http://www.spitzer.caltech.edu/features/hiddenuniverse/>

<sup>2</sup> [www.spacetelescope.org](http://www.spacetelescope.org)

<sup>3</sup> <http://www.myspace.com/jochenliske>

<sup>4</sup> <http://www.perix.de/>

of the Alps. The studio is equipped with some of the latest recording equipment including green/blue screens, high quality audio devices and High Definition video cameras. Recording of the narration is usually done by the head of the Space Telescope–European Coordinating Facility, Bob Fosbury.

Following filming each section is then taken back to the ESA/Hubble facilities where Martin Kornmesser, the main graphic designer, spends considerable time editing and bringing each episode to life. This includes post-processing of the green/blue screen footage to key out the background and insert images or animations, and also synchronisation between Dr. J's dialogue and any subsequent animations. The resulting combination of real footage, computer generated backgrounds and actual Hubble images makes for a dynamic and varied vodcast experience.

## Content

Since its inception the *Hubblecast* has strived to explain the (often complex) science undertaken by European astronomers in an interesting and understandable way. This has been often aided by the use of lavish high resolution images, narration and the use of animations. Now with the addition of a High Definition channel (June 2007) to the vodcast's output the quality of animations and graphics has been taken to a new, often never before seen, level. In some episodes Dr. J has been joined by professional scientists who are able to explain some of the work they do on camera, enabling a direct connection between the audience and the work the *Hubblecast* is trying to communicate.

## Format

The *Hubblecast* is provided in eleven formats across three different channels: standard definition (SD), High Definition (HD) and Full HD. This may indeed make it the world's first ever Full High Definition video-podcast. It can be downloaded easily from the *Hubblecast* website<sup>5</sup> as well as via numerous other online aggregators and video community sites such as iTunes (Apple's flagship music store). Viewers need not own an iPod or any other portable device as most media players on PCs or Macs can play the episodes. This means that the audience has the capability to watch the *Hubblecast* either sat at their computer or on their morning commute to work. Now with the advent of digital media receivers such as the Apple TV the *Hubblecast* can even be watched on a home television.

## Summary

So far there have been ten episodes of the *Hubblecast* with many more in the production line. With total download numbers above the one million the *Hubblecast* has undoubtedly reserved its place as one of the most popular science vodcasts of recent years.

For more information about the Hubblecast please visit :  
[www.spacetelescope.org/videos/hubblecast.html](http://www.spacetelescope.org/videos/hubblecast.html)

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<sup>5</sup> <http://www.spacetelescope.org/videos/hubblecast.html>