



Telescopes and Other Tools: Interpreting Tales Told by Unseen . . . Light

An Author Visit Program by Carolyn DeCristofano,
author of *Big Bang! The Tongue-Tickling Tale of a
Speck That Became Spectacular*

- ◆ How do scientists know what they know about the Big Bang?
- ◆ How do they collect and piece together evidence to determine whether it supports or detracts from existing theories?
- ◆ How does technology assist scientific exploration, and how does it work?

With engaging materials and fascinating content, author Carolyn DeCristofano delves into science and technology themes. Her program focuses on how scientists use telescopes and other imaging technology to detect invisible light as they explore space and the Big Bang. Through hands-on experiences, students learn about the role of technology in revealing “what’s out there,” as well as the role of inquiry, observation, and inference in developing science ideas. Students will learn how to make invisible information strikingly visual, model the use of radio signals, and seek data. The program provides an exciting lift to studies of energy, light, change, earth and space science, and imaging and communications technologies. Optional variations include mathematical extensions and

experiences that demonstrate how changes in a telescope can improve or distort data. The author will consult beforehand with teachers to ensure alignment with specific classroom goals and state standards. This program can be tailored for any grade from 3rd through 12th.

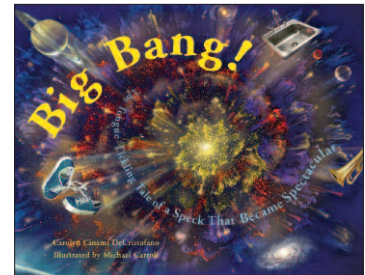
Students will:

- ◆ Model a space-telescope-to-Earth interface
- ◆ Make a map from invisible data
- ◆ Seek information in data patterns
- ◆ Interpret information from their data maps
- ◆ Make connections from this activity to content in the book *Big Bang!* and to their curriculum

A 90-minute program for one classroom includes:

- ◆ Pre-visit phone consultation
- ◆ Author reading of book
- ◆ Activity with discussion (data sheets provided)
- ◆ 1 classroom copy of *Big Bang!*
- ◆ Author question & answer

Extended programs are available.



1-57091-619-5 PB
1-57091-618-7 HC

Author Credentials

Carolyn DeCristofano is the author of two books for children, *Leonardo's ABC* (Museum of Science, Boston) and *Big Bang! The Tongue-Tickling Tale of a Speck That Became Spectacular* (Charlesbridge). *Big Bang!* has been described by the National Science Teachers Association as a “marvelous resource.” A science educator who has worked on projects with the Museum of Science, Boston; WGBH; TERC; Harvard University; and the Harvard-Smithsonian Center for Astrophysics; Carolyn is also recognized by the Massachusetts Cultural Council as a Creative Teaching Partner (Curriculum Planning and Development). She offers a wide range of author visit programs, all emphasizing curiosity, intellectual fun, and literacy and science. For more information, call the publisher at 800.225.3214 ext.122, or contact the author at carolyn@carolyndecristofano.com.