



**On the cover:**  
Artist Don Davis depicts a very large asteroid slamming into Earth about 600 million years after the planet formed.

**FEATURES**

- COVER STORY
20
**Pummeling the Planets**  
 Scientists are debating whether the entire solar system suffered a barrage of impacts long after the planets formed.  
*By Emily Lakdawalla*
- 28
**The Exoplanets that Weren't**  
 Misadventures in planet discovery have continued from 1855 through the present time.  
*By Brandon Tingley*
- 34
**NEAF Turns 20**  
 The annual Northeast Astronomy Forum has something for every amateur regardless of experience.  
*By Dennis di Cicco & Sean Walker*
- 68
**Spectroscopy for Everyone**  
 With inexpensive equipment, you can easily reveal the spectral signatures of everything from nearby planets to distant quasars.  
*By Tom Field*
- 72
**Trading Techniques**  
 Attending an astrophotography meeting can boost your imaging skills.  
*By Sean Walker*

**Find us on Facebook & Twitter**

# August 2011

VOL. 122, NO. 2



**THIS MONTH'S SKY**

- 40 **Northern Hemisphere's Sky**  
*By Fred Schaaf*
- 43 **August's Sky at a Glance**
- 45 **Binocular Highlight**  
*By Gary Seronik*
- 46 **Planetary Almanac**
- 48 **Sun, Moon, and Planets**  
*By Fred Schaaf*
- 50 **Exploring the Moon**  
*By Charles A. Wood*
- 53 **Celestial Calendar**  
*By Alan MacRobert*
- 58 **Deep-Sky Wonders**  
*By Sue French*
- 62 **Going Deep**  
*By Ken Hewitt-White*

**ALSO IN THIS ISSUE**

- 6 **Spectrum**  
*By Robert Naeye*
- 8 **Letters**
- 10 **50 & 25 Years Ago**  
*By Roger W. Sinnott*
- 12 **News Notes**
- 18 **Cosmic Relief**  
*By David Grinspoon*
- 64 **Telescope Workshop**  
*By Gary Seronik*
- 76 **Gallery**
- 86 **Focal Point**  
*By Walt McLaughlin*

Visit [SkyandTelescope.com](http://SkyandTelescope.com)



72

S&T: DENNIS DI CICCIO

SKY & TELESCOPE (ISSN 0037-6604) is published monthly by Sky & Telescope Media, LLC, 90 Sherman St., Cambridge, MA 02140-3264, USA. Phone: 800-253-0245 (customer service/subscriptions), 888-253-0230 (product orders), 617-864-7360 (all other calls). Fax: 617-864-6117. Website: SkyandTelescope.com. © 2011 Sky & Telescope Media, LLC. All rights reserved. Periodicals postage paid at Boston, Massachusetts, and at additional mailing offices. Canada Post Publications Mail sales agreement #40029823. Canadian return address: 2744 Edna St., Windsor, ON, Canada N8Y 1V2. Canadian GST Reg. #R128921855. POSTMASTER: Send address changes to Sky & Telescope, PO Box 171, Winterset, IA 50273. Printed in the USA.