

PRESS RELEASE FROM NATURE PUBLISHING GROUP  
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### ***Nature* goes 3-D**

*Nature* gains an extra dimension this week with its first PDF containing a three-dimensional interactive figure. Published in the 1 January issue, figures in a paper by Alyssa Goodman and colleagues enable *Nature* readers to view and rotate maps of molecular clouds.

The paper describes a new method for analysing 3D maps of molecular clouds, shedding light on the role of gravity in star formation. The researchers borrowed technology from medical imaging to analyse data cubes of molecular clouds, where the x and y axes represent the plane of the sky, and the third dimension (z) is velocity.

The PDF of the article makes the most of recent versions of Adobe Acrobat Professional, which enable the creation of PDFs from 3D and Computer Aided Design (CAD) file formats. The resulting PDF retains the structure and detail of the 3D model. While the PDF can be viewed and printed as normal, a window is embedded in the PDF adding extra functionality. Click on the image in the PDF and a 3D toolbar appears across the top of the image and the image becomes interactive. The tools provided allow the user to rotate the model, pan horizontally or vertically, zoom in or out, and to isolate or hide individual parts. To use the interactive functionality on 3D PDFs, users need Adobe Reader 9.0 or a more recent release.

The need for 3D figures is well-understood in fields from medical imaging to structural biology<sup>(i)</sup> and *Nature* expects that authors from many scientific disciplines will soon take advantage of this functionality. "By making this functionality available to *Nature* authors, we hope that our readers will take advantage of the ability to view and interact with 3D images," said Timo Hannay, Publishing Director of nature.com. "Developments in software capability and web functionality mean that scientific communication can be much richer and more dynamic than has been possible in the past. We will continue to make the most of these developments wherever we can to maximize our service to both authors and readers."

More information on the paper by Goodman and colleagues is available in the press release from the *Nature* press office.

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## References:

- (i) Hodis *et al.*; *Genome Biology* 2008, **9**:R121 (doi:10.1186/gb-2008-9-8-r121). Accessed 22 December 2008 from: <http://genomebiology.com/2008/9/8/R121>

Reference information for the paper by Goodman and colleagues: *Nature* **457**, 63-66 (1 January 2009) | doi: 10.1038/nature07609. URL:  
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