Stargazers Take Note

THE EASILY VISIBLE rings of Saturn, made of ice and dust that reflect the sun's light in vivid hues of orange and yellow, have some company. University of Maryland astronomer Doug Hamilton and colleagues from the University of Virginia have discovered a massive ring that lies in the outer reaches of Saturn's gravitational field. The ring has a diameter of about 22.5 million miles—almost 300 times the size of Saturn, which itself is almost 95 times the size of Earth. It is also very thick: About 20 planets the size of Saturn could stack vertically inside it, easily making it the largest planetary ring in the solar system. This NASA rendering shows Saturn enlarged in the circle to the right and represented as a mere dot at the center of the newly discovered ring. —TV

Measuring National Happiness

AMERICANS' OBSESSION WITH sharing every thought and feeling may provide enough data for a Maryland adjunct professor to craft a policy-influencing happiness sensor.

"Gross domestic product is not the only way to gauge" a country's well-being, says Chris Danforth, who is with Maryland's earth sciences department and an assistant professor in the University of Vermont's Department of Mathematics and Statistics. Bhutan, for example, has a nearly 30-year-old, influential Gross National Happiness index.

Using word-processing software, Danforth and Vermont colleague Peter Dodds are tagging approximately 1,000 keywords from public Twitter, Facebook and other social media pages, along with song lyrics and State of the Union addresses, rating billions of sentiments on a 1-to-9 scale.

Their "hedonometer" is a more honest measure of societal happiness than surveys because these unsolicited feelings tend to be more genuine than answers to questionnaires. The researchers look forward to improved technology and software that will allow them to capture more text from more sources.

“We hope to harness tweets to learn what makes people happy,” Danforth says. —MAB