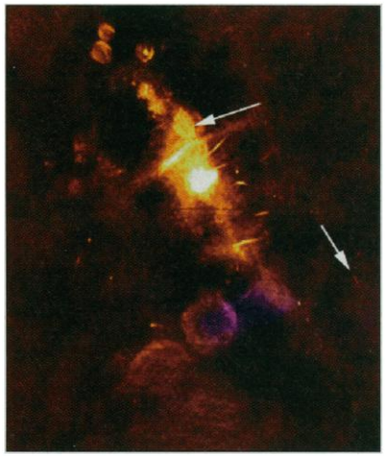
Radio Guide to The Heart of the Milky Way



The clearest image yet of the turbulent core of the Milky Way—processed from 27 ground-based radio telescopes—has given astronomers a panoramic view of the action churning around the black hole believed to be at the center of the galaxy. The image, which covers a swath of sky as broad as eight full moons, was unveiled earlier this month at an American Astronomical Society meeting in Austin, Texas.

Scientists at the Naval Research Laboratory in Washington, D.C., reprocessed radio images from the Very Large Array in Socorro, New Mexico, that penetrate the thick veils of gas and dust shielding the core from view. "This is by far the widest field of view of the galactic center at high resolution," says team leader Namir Kassim. The image reveals hot cradles of baby stars, ghostly outlines of ancient supernova explosions, and glowing bands revealing the paths of intense magnetic fields. It shows several new swirling gas patterns, including a supernova remnant (upper arrow) and a bright band called the "Pelican," for its bird-like profile at higher magnification (lower arrow). The Pelican lines up parallel to the plane of the galaxy, while all other bands are perpendicular, which could reflect a twisting of the magnetic field near the black hole.

The display is "magnificent," says radio astronomer K. R. Anantharamiah of the Raman Research Institute in Bangalore, India. He notes that it will serve primarily as a "finder atlas" for radio astronomers.

CREDIT: NAMIR KASSIM *ET AL.*, NAVAL RESEARCH LABORATORY

Record Home Run Benefits Cancer Research

Last summer a crack of slugger Mark McGwire's bat slammed a very special baseball into the hands of fan and genome scientist Philip Ozersky. The ball brought McGwire his record-setting 70th homer. And this week it made 26-year-old Ozersky rich, selling for just over $3 million at a New York auction.

"It was really wild hearing those numbers go higher and higher," Ozersky told *Science*. "It's a lot of money." Ozersky says he will donate part of his catch to the American Cancer Society, the Leukemia Society of America, and a charity set up by the St. Louis Cardinals.

Ozersky works as a "finisher" at Washington University's Genome Sequencing Center in St. Louis, Missouri. The first stage of shotgun sequencing produces long stretches of decoded DNA; Ozersky's job is to puzzle out how those bits fit together and fill in the inevitable gaps. Over a million base pairs have passed through Ozersky's care, some belonging to the recently completed nematode worm, *Caenorhabditis elegans*. His group is currently working on human chromosome 22.

Appropriately, Ozersky attended the auction wearing a tie adorned with a double helix. "I'm not usually quite the fashion person," he says, but his girlfriend persuaded him that this was an occasion for DNA.

NSF Picks Up on Rising Computer Usage

Last summer, the National Science Foundation (NSF) axed a bimonthly lay publication, *Frontiers*, and began designing a cybermagazine to replace it. The thinking was that the Web was a better—and cheaper—way to go. Now agency officials have some fresh data to support that decision: A new Gallup poll that explored public attitudes toward the millennium bug also found greater use of the Internet than even NSF officials had guessed.

NSF didn't need the poll to tell it what it already knows about scientists' love affair with the Web. Last year it dropped paper versions of two research publications—a guide to programs and a bulletin of grant opportunities—and saved $125,000 a year. But last month's survey of 1032 adults by the Gallup Organization for NSF found that three-quarters have computers at work or home and 53% use the Internet. Those numbers, says NSF public affairs chief Julia Moore, suggest that a new electronic product will serve a lay audience as well as or better than a paper version, which costs $126,000 a year to print and mail.

Kinder, Gentler Plagiarism Policy?

If you're caught plagiarizing, is it punishment enough to say you're sorry? Yes, the Johns Hopkins University School of Medicine has decided in a case that surfaced last month. An assistant professor accused of copying text verbatim from a well-known expert's work was retained on the condition that he make a public apology.

Anish Bhardwaj admits in a note in the December issue of *Anesthesiology* that he lifted "about 40%" of an editorial he co-authored in the journal's August issue. His source was "Brain Protection in Neurosurgery"—part of an anesthesiologists' refresher course written by James Cottrell, chair of anesthesiology at the State University of New York Health Science Center in Brooklyn.

Bhardwaj explains that he faced a tight deadline after being asked to write the editorial by his mentor, Hopkins associate professor Jeffrey Kirsch, who is listed as co-author. "I lost sight of the original source ... and failed to reference" it, Bhardwaj writes. This "serious mistake," he adds, "was committed out of a combination of carelessness, haste, and inexperience." (Bhardwaj says he has authored many articles, but no other editorials.) Kirsch, in an accompanying note, writes that he reviewed the plagiarized editorial but didn't know of Cottrell's text. He says Bhardwaj is "an extraordinary, hard-working, and thoughtful investigator."

Hopkins appears to feel Bhardwaj has suffered enough. Bhardwaj thinks so: This has been the "most horrendous experience of my life," he says. Cottrell could not be reached for comment.