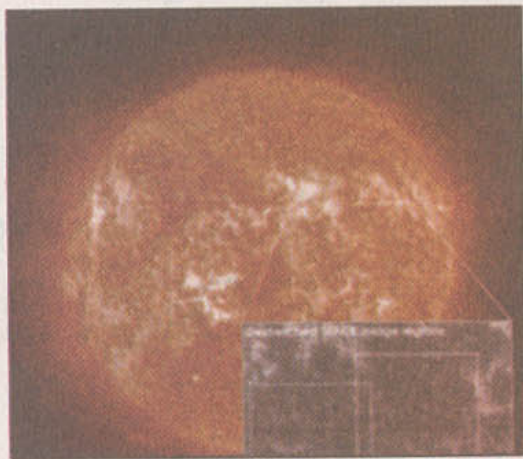


Astronomers have identified ultrasound-like waves in our sun's atmosphere that could explain some strange aspects of solar weather. An analysis of data from NASA's TRACE spacecraft suggests that the waves could be



'Ultrasound' and Solar Weather Mystery

ultraviolet telescope and found evidence of waves with a frequency of 100 millihertz, which corresponds to a sound 300 times deeper than the lowest noise audible to the human ear. "These ripples seem to be carrying about one kilowatt of power per square metre on the surface of the sun," says DeForest. "something is releasing energy into the environment and that release has a recognisable sonic signature."

responsible for the star's unexplained extra heat. The surface of the sun reaches a blistering 6,000 degrees Celsius. The chromosphere or middle solar atmosphere, is even more scorching at 100,000 degrees Celsius, whereas the solar corona is the hottest part of all, with temperatures nearing a million degrees Celsius. Just what causes these wide discrepancies in temperature has intrigued researchers for decades. Craig DeForest of the Southwest Research Institute and his colleagues analysed data from the TRACE

Gambling is Similar to Drug Addiction

A new study published in the journal 'Nature Neuroscience' has indicated that serious gamblers demonstrate a similar pattern of brain activity to people who are addicted to drugs. The researchers from Hamburg, Germany, said that gambling was also a form of addiction. The parts of the brain which are active when people feel rewarded, curbing activity, are less so in those who take drugs or gamble to excess, they said. In the study, the brains of 12 compulsive gamblers and 12 non-gamblers were monitored using functional magnetic resonance imaging (fMRI) while they played a simple card guessing game. Players had to choose one of two facedown cards. If the card came up red, they won one euro. It was found that the ventral striatum, a part of the brain that signals reward, was less active in the pathological gamblers even though both groups won and lost the same amount of money. Reduced activity in the area is recognised as a hallmark of drug addiction. This study is one more piece of the jigsaw that helps give gambling legitimacy as a bona-fide addiction.

concentration. The programme surveyed a group of primary school pupils and found one in five had played Grand Theft Auto --- a notorious 18-certificate game where players steal cars, kill people and pick up prostitutes. "Many children who love computer games find it hard to concentrate on

the sort of tasks that require slow application and are necessary for school success," he said. Those who spend long periods playing quick-fire, adrenaline-pumping games often lack a long-term attention span, he found. "Digital media may well have some dangers as well as some advantages for children. Modern children are spending three to four hours a day in front of a computer or television screen of some kind, often unsupervised," he added.



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