

G-Com<sup>®</sup> makes this possible:

# With 66 Milliwatts from German to Australia

Successful test connection more faster than light.

New opportunities for SETI. By Dr. Hartmut Müller, Wolfratshausen.

After the prelude to the G-Com<sup>®</sup> era on 27 October, 2001 with a voice connection from Bad Tolz, to St. Petersburg (see space and time No. 114, 115) on 2/3 January 2002 superluminaire G-Com<sup>®</sup> test compound Australia - Germany successfully activated. This is the largest distance that was bridged by G-Com<sup>®</sup>. It was physical phenomena-the who observed that in the Institute for Space-Energy-Research Leonard Euler (IREF) now move to evaluate some new astrophysical insights. A preliminary analysis of the test sequences are reasons to believe that there is already a global super-power in the universe luminares communication or in our galaxy.



**E**rfurt, on 2 January 2002, 22.35 clock time: "Siegfried, Happy New Year! What are you doing now?" - "We are just at breakfast. Hartmut, you get that signal?" - "Yes, but there's something that I can not explain. Approximately every 48 hours the signal disappears for a few minutes." - "I do think that I can explain." - "Have you any idea?" - "Yes, quite a plausible even. Every other day I change the batteries in your BIOGUARD". With this phone call that probably most exciting experiment

launched in the history of communications since Guglielmo Marconi's to bridge the Atlantic Ocean (1901). The pulsed with about 5 hertz signal of BIOGUARDs hovering in Siegfried Prumbachs pocket in about 1 meter height above the Australian continent was well detectable in Erfurt. Nothing Particular more complete, one might think.

Amateur radio operators to chat via shortwave around the globe. That is correct. However, this sensor deleis-tungen are necessary that

can be up to 750 watts-tions. The BIOGUARD has a power consumption which is 10,000 times less. She is 66 milliwatts. He also did not "send". That is, it does not directly produce the carrier wave, but coupled in an existing carrier wave a na-of natural origin, which conveyed its signal. Therein lies the "secret" of the G-Com<sup>®</sup> technology, which can therefore operate with extremely low energies.

Natural "transmitters"

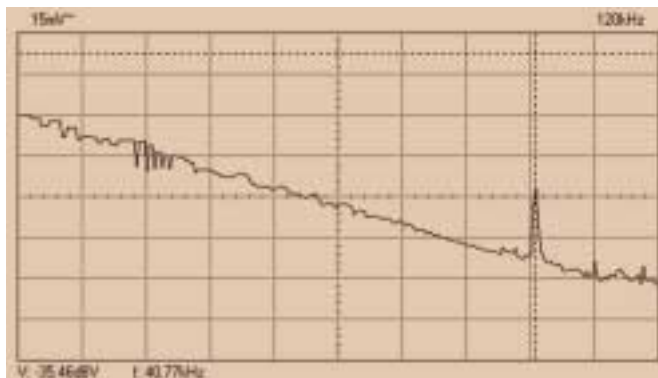
The idea of using electromag-

netic waves to transmit information is of natural origin, about 100 years old. Recognized in 1895 by the Russian physicist Alex Popov-andr Steppanowitsch the atmosphere as a inherent transmitter and registered thunderstorms over long distances. Eddy currents in electrically conductive ionized layers of air and gas electrical discharges cause of atmospheric pulse radiation, the "frequency space" in the ELF

and VLF range (1 Hz to 100 kHz) and have a relatively stable range. The Formation of ionospheric air-layers are under the influence of UV and X-Shares of sunlight, the solar wind (particle of solar plasmas) and cosmic rays (energetic particles of galactic and extragalactic origin). The intensity of the ionizing radiation varies considerably in the day / night cycle, on an annual basis and in the Rhythmus of solar activity. Nevertheless, the chemical, thermodynamic and electromagnetic stratification of the atmosphere on a comparable flowering stability, which is not the result of continued-while changing factors, but the stabilizing effect we-acting gravitational background field.

The intensity of gravitational field station drops with the square of the height. The constant equipotential case reports

constant acceleration toward Earth center point creates a vertical exponential distribution of the air molecules in accordance with the barometric height formula. The air density decreases with increasing altitude so after an exponential function. However, simply because no stable layers in the atmosphere arise. New findings in the field of gravitational research (see space and time special 1) give rise to the presumption of conformity that a global stand-de density or pressure wave in the universe is the reason that many natural phenomena a amazingly Fende values stability of the day . place The existence of these global density wave was proposed in 1982 in the framework of the Global Scaling Theory and was first detected in 1986 directly. With their antinodes ousted the standing pressure wave matter, so



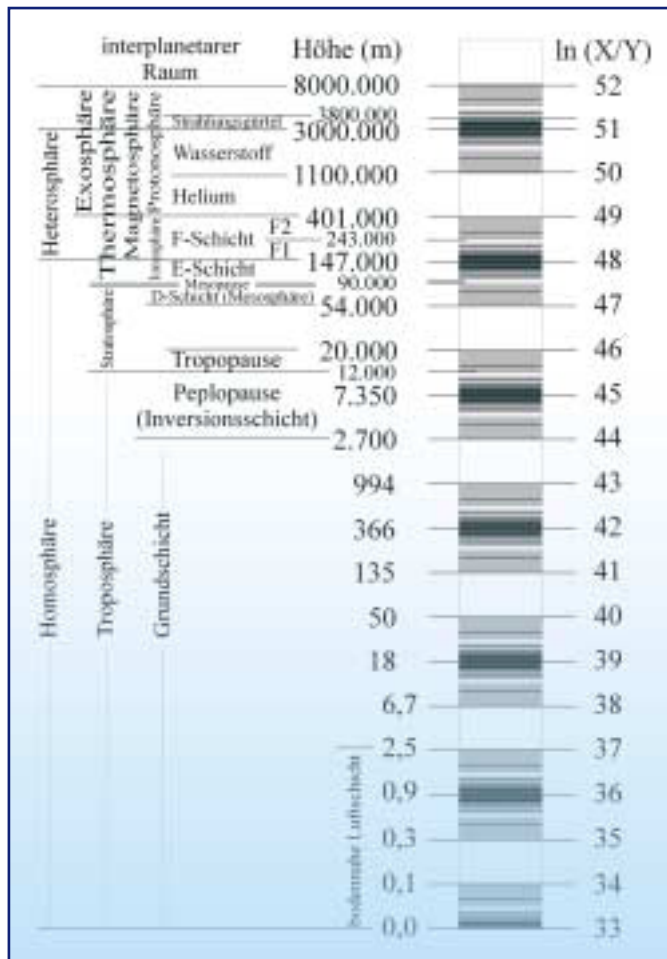
**Thanks to its unusually high stability, it is relatively easy to identify the frequency of 40.8 kHz, the standing gravitational wave in logarithmic spectrum of natural gravitational background field.**

that it is concentrated in the nodes. This is done at regular intervals on the logarithmic line of relative standards because the nodes of the standing-wave pressure at a distance of 3 units of the natural logarithm. The antinodes produce 1 log unit broad te gaps, so that the matter at the regularly distributed-routine 2 log units wide fragments of the logarithmic line.

Natural values of stability

In antinodes of global standing pressure wave, there is positive pressure, negative pressure in the nodes. The result is a matter of global flows towards nodes that reveals itself depending on the scale as a gravitational attraction

(gravitational pull after Eduard Krausz), magnetic, electrostatic attraction or nuclear (strong nuclear binding forces). The positive pressure in the vibration antinodes produced at different scales weak nuclear decay forces



The distribution of atmospheric layers of height X has a fractal GS-chain fragmentation ( $Y = h / mpc = 2.103$  (10-16m), mp is the proton mass). This is true both for the stratification of the atmosphere according to their chemical composition (in homosphere and Straight-sphere), and the stratification according to different parameters such as temperature (troposphere, stratosphere, meso- and thermosphere), ionization (D, E and F layers) and Earth's magnetic field (magnetosphere, radiation belts, exosphere) to. The cause of this phenomenon is the existence of a global standing density wave (non-Einstein's gravitational on shafts can), which determines the scale distribution of matter in the universe. As agents could the incident from the sun particle radiation (solar wind) are considered, which not only causes ionization of the air atoms and an enhanced electron concentration above 50 km altitude, but also the atmosphere to natural oscillations excites. Due to the exponentially increasing (towards the surface) air density are the nodes and antinodes vertically standing pressure waves distributed logarithmically regularly.

electrostatic, magnetic or gravitational repulsion (antigravity). The nodes (resting points) of the global stand-pressure wave (no-one Einstein's gravitational waves) are in logarithmic space of scales anchored, causing the physical phenomenon of natural values of stability. Not only are the rest masses of elementary particles, the spectral lines and atomic numbers of the atoms, the masses of stable isotopes and molecules are characterized by natural values stability, they are one of the fundamental constants, like the speed of electromagnetic waves in vacuum, vacuum, Planck's mode of action quantum, or the electric charge of the electrons. sets you the value of any-one fundamental constant at 1, also in logarithmic space to 0 can, one very simple values node-more (attractor) be - count corresponding to other natural constants. Calibrates one logarithmic number line for example with the Rest mass of the proton  $m_p$ , can be found in the nodal point in 1452, the rest mass of the neutron  $m_n$ :

$$\ln(m_n) - \ln(m_p) = \frac{2}{1452} = \frac{1}{726}$$

The global standing pressure wave "chopped" mix the logarithmic space by a fractal algorithm that is described in the general case by an NEN continued fraction. The logarithmic space of relative standards possesses the fractal geometry of a deformed hyperbolic optimized Cantor set (see space and time No. 114, "telecommunication without electric smog"). The recursive chain - that the concentration of matter in hyperbolic node proximity increases. For

systems whose standards are within a 2 cal logarithmic, applies to the distribution of local attractor worth following chain breaks rules:

$$\ln(X/Y) = n_0 + \frac{2}{n_1 + \frac{2}{n_2 + \dots + \frac{2}{n_k}}}$$

$$= [n_0; n_1, n_2, \dots, n_k]$$

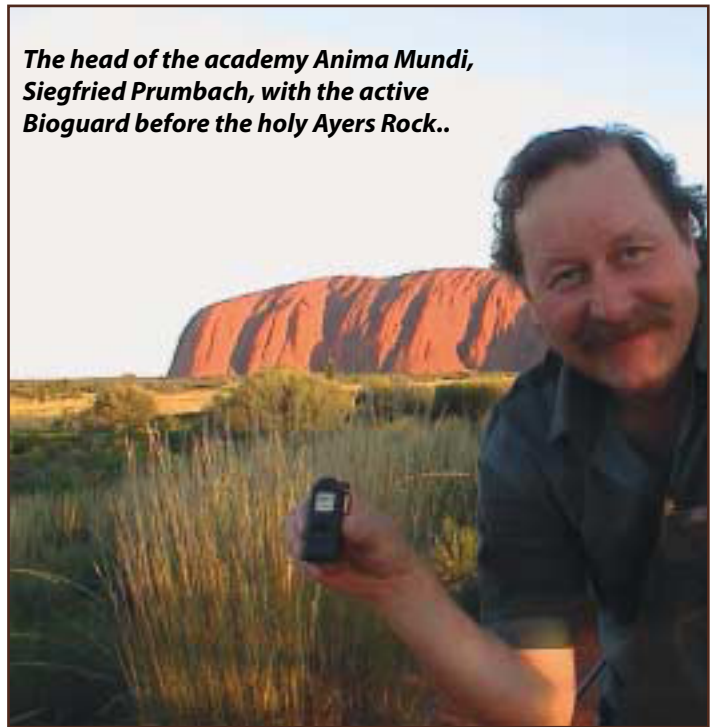
X is a physical quantities SSE, Y a natural standard measure (natural constant). The free limb and the partial denominator  $n_0, n_1, n_2, n_3, \dots$  of the continued fraction are integers which can be divided by 3 without remainder. This is a quantization of standards. Etc. on the approximation breaks  $[n_0], [n_0, n_1], [n_0; n_1, n_2], [n_1, n_2, n_3, n_0]$  the tailor-rod union levels (scaling layers) 0, 1, 2, 3, etc defined.

The distribution of sub node areas and sub-bellies within a node on each scale range is the same physical level. Each sub knot range of level 1 has exactly the level 2 the same surface area of the substructure as each node level 0

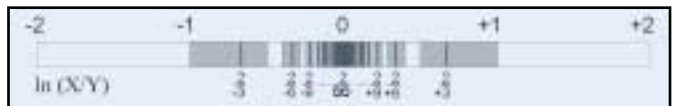
The expanding Universun

If you mark the sub node areas dark (increased matter concentration) and Sub bellies light (gaps in the distribution of matter), can the fractal fraction structure of a scale physical level (here the level 0) represent graphically (see graph "node area").

The amount of the eigenvalues of the global scaling fraction continued is identical with the solution set of Euler Lang rank Eschen equations of motion for expanding



**The head of the academy Anima Mundi, Siegfried Prumbach, with the active Bioguard before the holy Ayers Rock..**



**Graphic "Node area"**

exponentially, vibrating with a small amplitude Ket-component systems (see space and time special 1, "Global Scaling"), which probably our universe belongs.

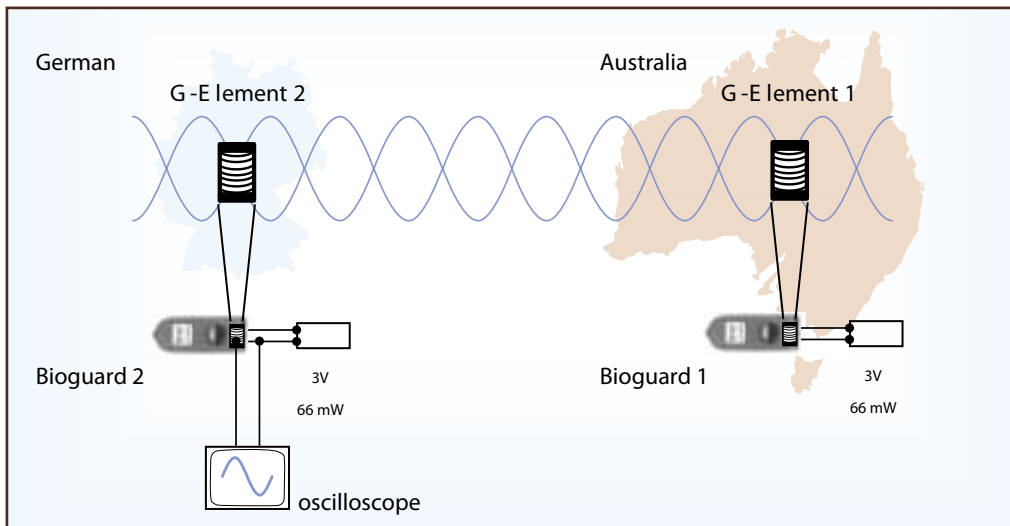
The with enigmatic penetrance over all cosmological scales passing through Hubble's law shows that our universe is expanding exponentially. This has the consequence that the density of matter is-if exponentially with increasing scale falls and on the upper scale union horizon of the universe or a minimum value at the lower scale horizon of reaching a maximum value. Material density waves are reflected

at these two horizons union scale, over-accumulate, and thus lead to the formation of standing density waves (non-einstein-specific gravitational waves) that will enable the whole universe on all scales in synchronous natural oscillations.

An outstanding property of this Global Scaling based cosmological model is that the distribution of matter not only high in cosmic, but in all scales (morphologically) properly and quantitative (statistical) accurately describes.

The atmosphere be-seated upper and lower horizon, which are characterized by minimum and maximum air density. Caused by the solar wind density waves (sound waves), which propagate between the two horizons are partially reflected there, so that emerge also standing pressure waves that stimulate the atmosphere to natural oscillations..

Exponential the change air density with altitude causes a log-periodic change of nodes and antinodes vertical ste-existing pressure waves, so that atmospheric layers with logarithmic fractal chain fragmentation (see graph "node area").



The graph shows the basic structure of the G-Com® lineage Australia-Germany. About the BIOGUARD in-1 includes G-element (graphic vielelektrischer converter) generated by an electrical resonant circuit pulsed 5 Hz signal was [-54] to be log-harmonically undershoot the standing gravitational 40.8 kHz channel [-45] on modular in isolation. About the 40.8 kHz channel is the (previously tuned) G element of BIOGUARD-2 in Germany in resonance coupling with the BIO-GUARD-1 in Australia.

The Earth's atmosphere has well-developed fractal scale levels (scaling layers), so it is quantized. The Earth's atmosphere is not the only system whose stratification (quantization) a GS-chain fragmentation has on. Also the scale quantization of Sonnenat's atmosphere, rings of Saturn, the planet and Mondbah machines, the wavelengths of the electromagnetic spectrum, the atomic radii, etc. obey this law of nature (see space and time special 1, "Global Scaling"), the physical properties of the proton play the role of universal natural gauges.

It is natural to assume that identical phenomena have a common cause. Therefore, one can walk away from, that the solar wind caused standing sound waves not the actual cause of GS-stratification of the atmosphere, but are only an intermediary role-play, thanks to the fundamental structure of the logarithmic space the standards also reflects the structure of the Earth's atmosphere.

The pulsation of the universe

Helio and specific data provide insight into the dominant role played by the standing pressure or pressure waves in the

global morphogenesis. Already in the 70s discovered acoustic oscillations of the sun. Today we know that the spectrum contains more than 100,000 individual notes, all located in the infrasonic range.

The sun swells up rhythmically and then runs back together. It changes like your in a diameter approximately 5 minute intervals (main frequency) around 1000-2000 kilometers. Oscillations were also observed at the Sun-like stars, for example, beta Hydri, the snake in the constellation Southern

Pulsation Class	Pc 1	Pc 2	Pc 3	Pc 4	Pc 5
Vibration period (Seconds)	0,2-5	5-10	10-45	45-150	150-600

Water is to be found and the acoustic main pulsation frequency is about 1 per 17 minutes. Our neighbor-star Alpha Centauri A powder-Explicit with a period of about 7 minutes.

The natural vibrations of the Cepheids, as well as the purely radial pulsations of other types of variable stars are, standing sound waves in the atmospheres of these stars. Their periods - ie the time between two consecutive brightness maxima - are in the range of several to about a hundred days. The constant "fluttering"

special solar wind disturbs the ionosphere and Earth's magnetic field stimulates into natural oscillations that are in the ULF range (ultra-low frequency) between about 1 MHz and 5 Hz. The spectrum of these fairly regular geomagnetic oscillations (continuous pulsation) (see small table) in frequency bands (pulsation classes) un-subdivided: The cup-shaped space between the (electrically conducting) ground or water surface and the (also electrically conductive) Ionosphere is a natural resonator for electromagnetic waves of a

certain wavelength. The electromagnetic resonant frequency of the resonator (Schumann frequency) is about 8 Hz (the root), including overtone spectrum. The wavelength of the standing electromagnetic wave is identical to the circumference of the Earth (about 40,000 miles). Standing waves are not exceptional in nature. On the contrary. Natural media are limited and their physical properties (density, elasticity, electrical conductivity, etc.) change on certain standards. These surfaces

are more reflective cross, overlap and it comes to Herausbildung of standing waves. Standing waves have no net Locomotive wave front propagating with (maximum of) the speed of light. Pulses or signals, the "surf" on standing waves, are transported to a shock wave through the shaft. The time  $\Delta t_s$  that is necessary for this depends only on the natural frequency  $f$  of the standing wave:

$$\Delta t_s = \frac{1}{f}$$

Only when surfing over wavelengths of a standing wave grows the surfing speed on the phase velocity of a continuous-wave of the same border Frequency beyond, so that superluminal speeds can be achieved:

$$\frac{\lambda}{\Delta t_s} = \lambda f = c$$

The, "Surfing" time " $\Delta t_s$ " is therefore independent of the distance between two nodes, which always is a half wavelength  $\lambda$

# Glossary

## Doppler effect

Moves the transmitter or receiver of a shaft relative to the wave-transmitting medium with the velocity  $v < c$ , the frequency changes of  $f$  progressive oscillation process by the amount

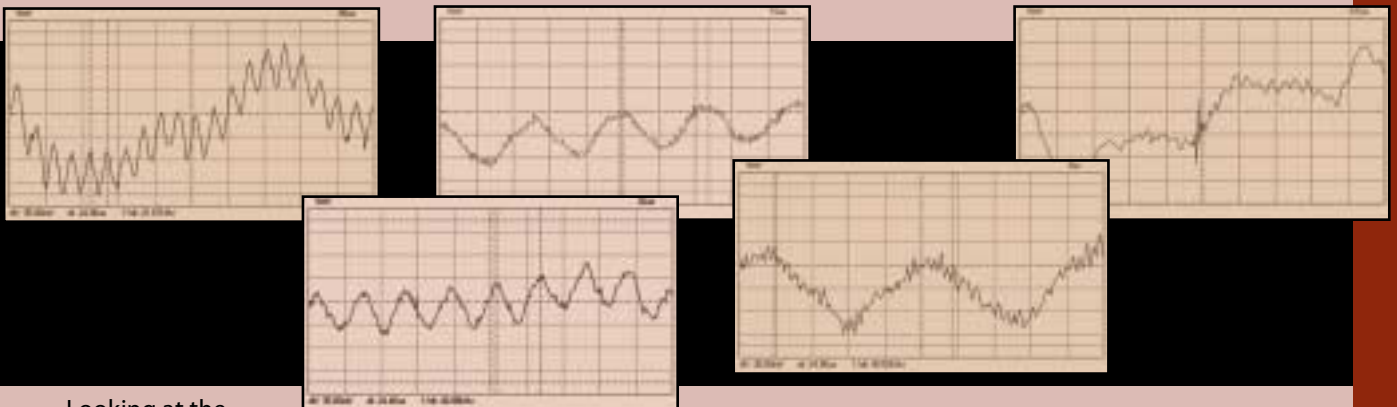
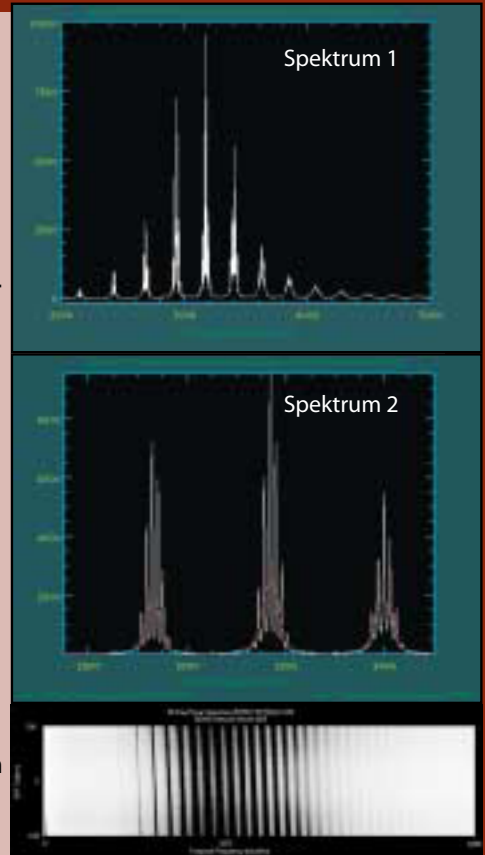
$$\Delta f = f \cdot \frac{v}{c}$$

when  $c$  is the propagation velocity of the Waves front. The ratio is known  $\frac{v}{c} = \frac{\Delta f}{\Delta f}$

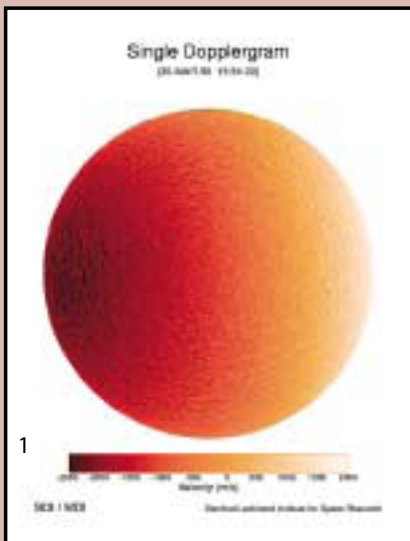
as redshift (if  $z > 0$ ) or blue shift (if  $z < 0$ ). Christian Doppler, Professor of Mathematics in Prague and Vienna, published the principle named after him in 1842—first as applied to the color of the stars. He assumed that a star, who moved to the earth, must have a color that is closer to the blue end of the spectrum, while its color must be redder when it moves away from us.

Oscillations of the sun, whose portfolio includes more than 100,000 individual notes and over 15 octaves goes, all lie in the infrasonic range.

The sun swells up rhythmically and then runs back together. It changes like your in a diameter about 5 minute rhythm to 1000-2000 kilometers. The fractal log-hyperbolic substructure of the power spectrum of these oscillations is morphologically identical to the sub-structure of a node ranges Ches of global stationary compression wave in the universe. **Graphic: Global Oscillation Network Group (GONG)**

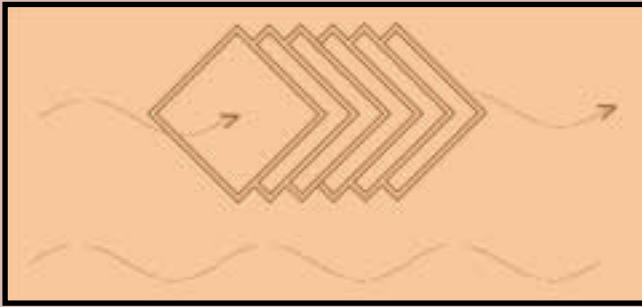


Looking at the "Unloaded" 40.8 kHz channel at a time gravitational lens (oscillograms 50 microseconds, 20 microseconds, 10 microseconds, 5 microseconds and 0.5 microseconds), one can see the pulsed harmonic modulation.



Through comprehensive survey of Redshift of the solar spectrum and their interpretation on the basis of the Doppler effect can detect the movement of the sun's surface to the pixel. The Doppler program reveals the rotation of the solar surface. Subtracted to the global rotation component of the redshift, the oscillations of the solar surface are clearly visible. The computer graphics simulating some harmonics of acoustic oscillations.

**Doppler frames:**  
Stanford Lockheed Institute for Space Research, Computer Graphics: Birmingham Solar Oscillations Network (BISON)



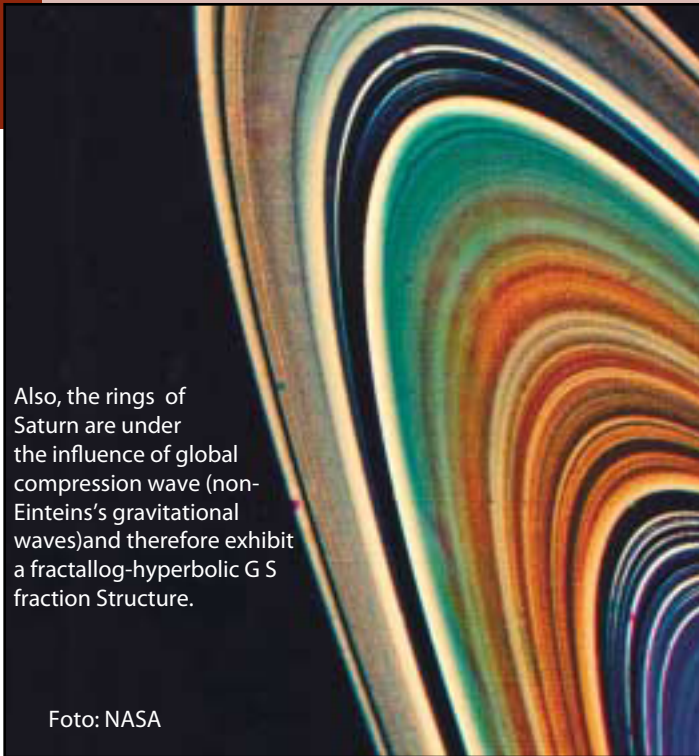
Back in 1992 succeeded the Cologne University Professor Günter Nimtz the experimental evidence that electromagnetic signals (in the microwave and optical range) through undersized sections of a waveguide, optical gratings or prisms double tunnel faster than light speed. The tunneling time depends only on the frequency  $f$  of the wave packet, but not on the length of the tunnel. The parameter values of the photonic tunneling give rise to the presumption that favor the formation me Tunnelsysteme standing electromagnetic waves that carry the signal to a shock wave, so in time  $D t = 1$  over the entire tunnel.

$$f \quad \Delta t_T = \frac{1}{f}$$


Andromeda-Nebel  
M31  
Foto: NASA

Standing electromagnetic waves, sound waves and gravitational waves are not rare in nature. They are formed in the earth and proven solar atmosphere, the solar system and probably also in the interstellar medium of our Galaxy. Therefore, it is reasonable to assume that electro-magnetic and gravitational signals also can tunnel over astronomical distances. This approach followed the Russian astronomer NA Kozyrev in the mid 70s.

As a result, a seven-year series of observations of the Andromeda galaxy M31 at the 50-inch reflector of the Crimean Observatorium he succeeded superluminal events prove. Should it prove that electromagnetic events in the interstellar space tunnel, at least on legs, would have far-reaching implications for astrophysics, Astronomy and cosmology (Photo: NASA).



Also, the rings of Saturn are under the influence of global compression wave (non-Einstein's gravitational waves) and therefore exhibit a fractallog-hyperbolic G S fraction Structure.

Foto: NASA

The surfing speed over a whole wavelength  $\lambda$  of a standing wave is the same as the phase velocity of a progressive wave.:

$$v_s = \frac{n \lambda}{\Delta t_T} = n \lambda f = n c$$

Experiments with undersized waveguides, optical lattices and double-prisms that Prof. Günter Nimtz on Second Physical Institute of the University of Cologne conducted, the possibility to

prove sensitivity of signal transmission with Superluminal speed. By waveguide sections whose cross-section is perpendicular to the propagation direction of the electromagnetic wave is slightly smaller than a half-wavelength, single-phase tunneling (steamed) electromagnetic signals faster than light. The tunneling time  $\Delta t_T$  depends only on the Frequency  $f$  of the wave

packet:

$$\Delta t_T = \frac{1}{f}$$

Assuming that promote undersized sections of a waveguide grating or double prisms the formation of standing waves and interpreted the tunneling time  $\Delta t_T$  as surfing time  $\Delta t_s$ , we obtain for the tunneling rate  $v_T$  a single-phase signal:

$$a \quad v_T = \frac{c s_T}{\lambda/2} = \frac{2 c s_T}{\lambda} \quad \frac{1}{f}$$

$s_T$  is the tunnel,  $c$  is the speed of light,  $\lambda$  is the wavelength of the signal. In a tunnel of length  $s_T = 114.2$  mm and a signal frequency of  $8.7 \pm 0.5$  GHz, the  $34.6 \pm 2.0$  mm corresponds to a wavelength of  $\lambda =$ , for single-phase signals are rate-tunnel speeds expected that the 6 - match times the speed of light. The measured value of 4.7 c (G. Nimtz, A. Enders and H. Spiekermann,

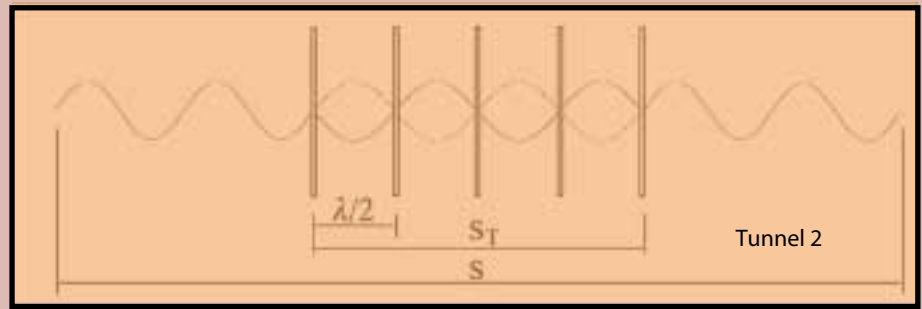
J. Phys. I, 4, 565) does not contradict the theory of water.

### Multiple velocity of light speeds by tunneling

Thus, in a medium conditions which would lead to the partial reflection of a carrier wave of the frequency  $f$ , namely over a distance which corresponds to the whole-numbered multiple of half the wavelength tunnels a modulated signal, within the time interval  $\Delta t_T = 1 / f$  such that superluminal transfer speeds can be reached.

During the G-Com<sup>®</sup> - test compound Australia-Germany, a pulsed-th signal in the ELF range mit  $f = 6.17$  Hz = [-54, +9, +3, -3, -12, -3, +3, -9 transmitted] on the standing gravitational wave [-45] = 40.8 kHz transmit.

The frequency dependence of the tunneling time causes the frequency superluminal signals increases during transmission (in the tunnel), and by an amount corresponding to a Doppler effect based on the negative red shift (blue shift).



For the duration of the signal transmission  $\Delta t$  is:

$$\Delta t = \frac{(s - s_T)}{c} + \frac{1}{f}$$

The  $v = s / \Delta t$ , the average speed of the tunneled signal over the entire distance  $s$ , we obtain for the reciprocal redshift:

$$\frac{c}{v} = \frac{1 - s_T}{s} + \frac{c}{s f}$$

This relationship shows that a transfer superluminal over a given distance  $s$  not with any.

Frequency  $f$  is possible. Even if the tunnel entire transmission path cover ( $s_T = s$ ), exists for each segment  $s$  a cutoff frequency below which a superluminal Transmission is not possible.

For a distance of  $s = 10,000$  km is this cut-off frequency  $f = 30$  Hz While the G-Com<sup>®</sup> transmission Australia-Germany a blue shift of -2.65 was measured.

Starting was 40.8 kHz from the carrier frequency, the  $s$  length  $T$  of the natural tunnel about 6200 km, what the dimension of the radius of the earth comes close.

These calculations give rise to the presumption, that the G-Com<sup>®</sup> communication is tunneled through the planetary body.

The unusually high stability of the global standing compression wave makes it relatively easy to identify the frequency of 40.8 kHz in the spectrum of the natural gravitational background field. The 6.17-Hz signal of the BIO-GUARD corresponds to an effective frequency of 5 Hz = [-54]. It was transferred several times after 48 hours continuous on the 40.8 kHz channel from Australia to Germany.

It could superluminal tunnels of 6.17 Hz signal can be detected by the 40.8 kHz channel, a red shift of -2.65 (blue shift). It was also found that the gravitational 40.8 kHz channel is frequency-modulated, which indicates a pre-existing use ne to global munikationszwecken Commission. Since this is a standing wave, for a frequency modulation, only the quantized frequencies of the harmonics can be used (the [-45] - frequency is a harmonic of [-54])

frequency logarithmic space). The sequence of harmonics has stable, irregularly recurring patterns that can be interpreted semantically NEN. The gravitational channels [-45] = 40.8 kHz, [-36]  $c = 330.6$  MHz, [-27] = 2.68 THz could therefore prove as relevant as part of the SETI-Project.

The SETI project

SETI stands for Search for Extra-Terrestrial Intelligence (genetic search for extraterrestrial intelligence), a NASA research program to search for radio signals that could have come from extraterrestrial civilizations. It includes the interception of solar-like stars near the Earth (up to 80 light-years away) with the largest available radio telescopes and a complete survey of the sky with smaller radio telescopes. For this, a new type of electronics will be used, which examines up to 20 million unnaturally narrow frequency bands appear

ing signals. The measurements started on 12 October (Columbus Day) in

1992. Nothing has been found so far.

### Summary

#### In this paper, put three scientific time bombs

What Dr. Mueller suggests here in the first physicist to-understand language, are three findings that provide some of the previously valid "laws" of physics in question. 1 The analysis of the transmission of the test signals to the G-Com<sup>®</sup> element was including first evidence that signal transmissions with multiple speed of light (up to 1300 times the speed of light), are possible (confirmation of the experiments of Prof. Günter Nimtz, Cologne) 2.

The superluminal speeds ranging in the area several times a thousand times the speed of light into force, this, in particular the distances of extragalactic objects that are so well calculated to light years to redefine. It might turn out that the entire astronomy must be recalculated, because with changing distances also result cosmic changed locations. 3 The evaluation of the test signals has proven once again that some frequencies of the standing gravitational waves, which are used by the G-Com<sup>®</sup> technology for telecommunications, are already occupied.

This could mean for SETI project a positive turn-ing. For, according to the findings of the Institute of Space and Energy Research GmbH in memoriam Leonhard Euler, Wolfratshausen search the experts of the SETI project extraterrestrial signals in the wrong room. In the next space & time-edition Dr. Mueller will explain the scientific detail and time bombs under-stand