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Generation of microwave self-channeling undamped temperature waves and their use for stimulation of nuclear fusion in remote and behind-screen targets

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The traditional interpretation of the channeling phenomenon is associated with the possibility of transporting particle or radiation beams over long distances without dissipation in specially ordered or focusing systems. It is shown that a similar process of quasi-channel motion with complete self-suppression of absorption and scattering can be realized for a weak (small in amplitude) temperature wave in any homogeneous material medium (including air) at very high selective wave frequencies. The interaction of these undamped waves with remote optimal targets leads to the stimulation of effective nuclear reactions (eg, d+d fusion) in these targets. It is shown that such effects occur even when such targets are placed at a great distance from the wave source behind a thick metal screen. All these phenomena are confirmed in experiments.

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