**Contact**

*If you could send a long message to such extraterrestrial beings - words, pictures, sounds, music - what would you say? How would you describe us? What would you leave out? Could you communicate intelligibly to very different beings with a wholly independent evolution? In 1977, at NASA's behest, a few of us had a remarkable opportunity to attempt such a (one-way) communication. Frank Drake suggested not a plaque, but a phonograph record. As described in the book,* ***Murmurs of Earth****, we designed and prepared the record to carry a rich message to the stars - 116 pictures and diagrams about our global civilization and our species, greetings, samples of the world's great music, the brain waves of a young woman in love and much else..*

**Carl Sagan** and **Ann Druyan** from the Carl Sagan Portal at <http://www.carlsagan.com/>

Dr. Carl Sagan devoted his life to research on the origin of life and the search for life and intelligence elsewhere in the cosmos. His novel, *Contact*, and the movie by the same name follow the adventures of Dr. Ellie Arroway as she monitors radio telescope feedback in her work for the Search for Extra-Terrestrial Intelligence, or SETI. One night, as the radio telescopes are pointed toward Vega, Ellie discovers some strange pulses through the background noise:

* Two pulses followed by a pause
* Three pulses followed by a pause
* Five pulses followed by a pause
* Seven pulses followed by a pause
* Eleven pulses followed by a pause
* Thirteen pulses followed by a pause
* Seventeen pulses followed by a pause
* Nineteen pulses followed by a pause
* Twenty-three pulses followed by a pause
* Twenty-nine pulses followed by a pause

The pattern continues through ninety-seven pulses followed by a pause and then repeats. Ellie is convinced that only intelligent life could generate the structure in the sequence of pulses. “It’s hard to imagine some radiating plasma sending out a regular set of mathematical signals like this.”