Cyberspace is not science fiction; it is an immense, invisible world teeming with activities that both make modern life possible and threaten it. Governed by logic, not physics, humans have little or no intuitive sense of the verities in cyberspace—neither the ingrained judgments relating space and time and size and weight we have in the physical world, nor the engineering discipline needed to create sound cyberspace structures. Trustworthy computing research at APL is all about making that logic visible, understandable, and controllable to increase the reliability and safety of cyberspace.