Alpha Decay Office Hours

It has hitherto been necessary to postulate some special arbitrary "instability" of the nucleus; but in the following note it is pointed out that disintegration is a natural consequence of the laws of quantum mechanics without any special hypothesis. . . . Much has been written of the explosive violence with which the $\alpha\text{-particle}$ is hurled from its place in the nucleus. But from the process pictured above, one would rather say that the $\alpha\text{-particle}$ almost slips away unnoticed.

GURNEY AND CONDON

I arrive at the Montreal office half an hour before office hours begin. He arrives at the same time, from the opposite direction. I say hello and my name. He unlocks the door. "I'm here early . . ." I start. He enters, puts down the briefcase, removes an Indian-style fur hat. Fox, I think. He hangs the hat and his brown sheepskin coat on the coat rack. I mimic him, taking off my own coat, but putting it on the chair beside me. He sits down behind his desk. Only then does he speak: "Let's start." But I cannot start like that. It is too late to offer a handshake or a hug or other formalities or niceties. Still, I muster up a half-hearted Namaste, putting my hands

together, the only thing left for me to do. Which is strange, because I never Namaste. Maybe he sees that. I reiterate my project goals and ask him to start by remembering 1967, the year he met my father. He does so naturally, his memory in this matter intact, an alpha particle decay but in reverse.

Dr. Sharma confirms that he told my father, who wanted to join the department as a graduate student when he first arrived as an immigrant to Canada, to go to a better university. But he then tells me a few things that do not match my father's story. That he was never the supervisor of my father's Ph.D. research. That he was never my father's mentor. That my father only went to two or three classes in his courses and never returned. That he hardly had any interactions with him. It was instead a Jewish professor my father worked for, who was his supervisor. The things that do not match what my father remembers do not seem to matter in and of themselves. And yet, I have stumbled onto a problem I cannot apply the scientific method to. What do you do when you know something is untrue but you cannot prove it? How can you tell the difference between a failing memory and a delusion? Which facts belong to whom? The electromagnetic forces become stronger than the nuclear forces. The alpha particle escapes through a tunnel and joins another nucleus. The truth slips away, unnoticed.