identification systems is obvious now, but it was not obvious twenty years ago. The electron detection system used lead-scintillator sandwich counters built by our Berkeley colleagues. The muon detection system was also crude using the iron flux return which was only 1.7 absorption lengths thick.

Discovery of the $e - \mu$ events

Both detection systems worked just well enough, so in 1974 I began to find $e\mu$ events, that is events with an e, an opposite sign μ, no other charged particles, and no visible photons.

By early 1975 we had seen dozens of $e\mu$ events, but those of us who believed we had found a heavy lepton faced two problems: how to convince the rest of our collaboration and how to convince the physics world. The main focus of this early skepticism was the γ, e and μ identification systems: Had we underestimated hadron misidentification into leptons? Since our γ and e system only covered about half of 4π, what about undetected photons? What about inefficiencies and cracks in these systems?

The questions inside our Mark I Collaboration were answered by George Trilling, Gerson Goldhaber and Burton Richter putting together an independent team of collaboration members. The charge to that team was to reanalyze all the data to try to make the $e\mu$ signal go away. But the $e\mu$ signal would not go away. The independent analysis agreed with my work and that is what convinced the collaboration.

I worked through the skepticism of the outside world by gradually expanding the geographic range of the talks I gave. And in those talks, I answered objections if I could. If new objections were raised, I simply said that I had no answer then. I then worked on the new objections before the next talk.

In June, 1975 I gave the first international talk on the $e\mu$ events[34] at the *1975 Summer School of the Canadian Institute for Particle Physics.* The contents of the talk are shown here.