

(Note that there are other papers covering the discovery of the Upsilon — such as Dan Kaplan’s version [11].)

## X ACKNOWLEDGEMENTS

As the experimental coordinator of CFS/E288 during the period 1975 to 1977, I participated in one of the most exciting episodes in my physics career. Most of the credit for this discovery belongs with

- Leon Lederman, the “founding father” and “leading light” of the experiment, as well as the collaboration’s spokesman. Many of the key concepts of the E70 and E288 experiment designs originated with him. In particular such crucial ideas for  $\mu\mu$ II as the Be absorber and many other issues (expected rates, detector arrangement, etc.) were first considered by him.

However, many others of the CFS/E288 collaboration played important roles in this discovery. (First, a caveat: the list below is based on my faulty 20-year old memories, as well as internal notes from that period — fortunately, several are job lists I wrote that have people assigned to each item; nevertheless, some significant effort is likely to be missed in the list below, and I apologize in advance to those collaborators who might feel slighted — note that the contributions listed below are specifically for the months leading up to the discovery, not to any prior or subsequent contributions):

- Steve Herb — the  $\mu\mu$ II upgrade manager, the major architect with Leon of the target box, shielding pile, etc. Also worked on PWC placement, survey, and off-line work on fiducial cuts, position of detectors, monitoring.
- Walter Innes — the production event-reconstruction expert and architect; off-line work on resolution, etc.
- Bruce Brown — the wire-chamber expert, who also proposed the iron remeasurement magnet.
- Dan Kaplan —  $\mu\mu$ II thesis student from Stony Brook; on-line expert; off-line work on analysis, MMPWC, magnetic-field study, muon criteria.
- Koji Ueno — the Monte Carlo expert and main architect; worked on acceptances, energy loss, etc.
- Jeff Appel — experimental coordinator from 1973 to 1975, a “founding father,” and worked on the design of E70 and early phases of E288.
- Chuck Brown — monitoring, triggering, facilities support, off-line work on resolution, chamber alignment.
- Dave Hom — thesis student for previous dielectron data.