

# $\pi$ Contamination Paper: Status

| Task  | Person                          | Timescale             |
|---|---------------------------------|-----------------------|
| ✓ Clarification plots*  | John Nugent                     | < 1 week              |
| ✓ Plots post CM42 comments**  | John Nugent                     | < 1 week              |
| → ✓ <b>Data reprocessing with DAQ unpacking fix***</b>  | John Nugent                     | ~ 1 week              |
| ✓ Systematic study of analysis result on pure muon beam ****  | John Nugent                     | ~ 1 week              |
| → Repetition of Orestano's systematic error study   | John Nugent                     | ~ 1 week              |
| Confirm double MIP peak due to PMT afterpulsing   | John Nugent                     | ~ 1 week              |
| New plots → MICE Note → Wise People   | Paul Soler                      | < 1 week              |
| MICE Note digested  | Dan Kaplan,<br>Yordan Karadzhov | ~ 2 weeks             |
| MICE Note comments received and implemented → return to Wise People. Publish MICE <u>Note</u> (on wiki/notes page/arXiv(?)) | PS, JN, DK, YK                  | Iterative             |
| Paper drafted   | Paul Soler                      | ~ 3 weeks             |
| Paper → Wise People   | Dan Kaplan,<br>Yordan Karadzhov | ~ 2 weeks             |
| Comments received and acted on.   | Paul Soler                      | Iterative             |
| Paper → Collaboration   | Paul Soler                      | 2 * 1 week iterations |
| Paper → Publish, reviewer comments, etc.  | Paul Soler                      | ...                   |

\* Plots of MC TOF distributions showing individual peaks for particles that are (a) muons at TOF0—2, (b) pions at TOF0—TOF1, but muons at TOF2, (c) pions at TOF0—2.

\*\* E.g. ensuring binning overlaps on histograms of TOF and “points”

\*\*\*Old and new versions of MAUS produced different output (MAUS Bug #1629). Durga proposed a solution, which John is now implementing and running today.

\*\*\*\* Analysis returns % contamination when run on pure muon sample?

# EMR Paper: Status

| Task  | Person                             | Timescale             |
|---|------------------------------------|-----------------------|
| ✓ Plots post CM42 comments  | François Drielsma                  | < 1 week              |
| → Improvements to range-momentum analysis   | Francois Drielsma, (Alain Blondel) | ~ 3 weeks             |
| → Write up long form (MICE Note) version of new analysis  | François Drielsma                  | ~ 3 weeks             |
| MICE Note → Wise People   | François Drielsma                  | < 1 week              |
| MICE Note digested  | Alan Bross, Ludovico Tortora       | ~ 2 weeks             |
| MICE Note comments received and implemented → return to Wise People. Publish MICE <u>Note</u> (on wiki/notes page/arXiv(?)) | FD, AB, LT                         | Iterative             |
| Paper drafted   | François Drielsma                  | ~ 4 weeks             |
| Paper → Wise People   | Alan Bross, Ludovico Tortora       | ~ 2 weeks             |
| Comments received and acted on.   | François Drielsma                  | Iterative             |
| Paper → Collaboration   | François Drielsma                  | 2 * 1 week iterations |
| Paper → Publish, reviewer comments, etc.  | François Drielsma                  | ...                   |