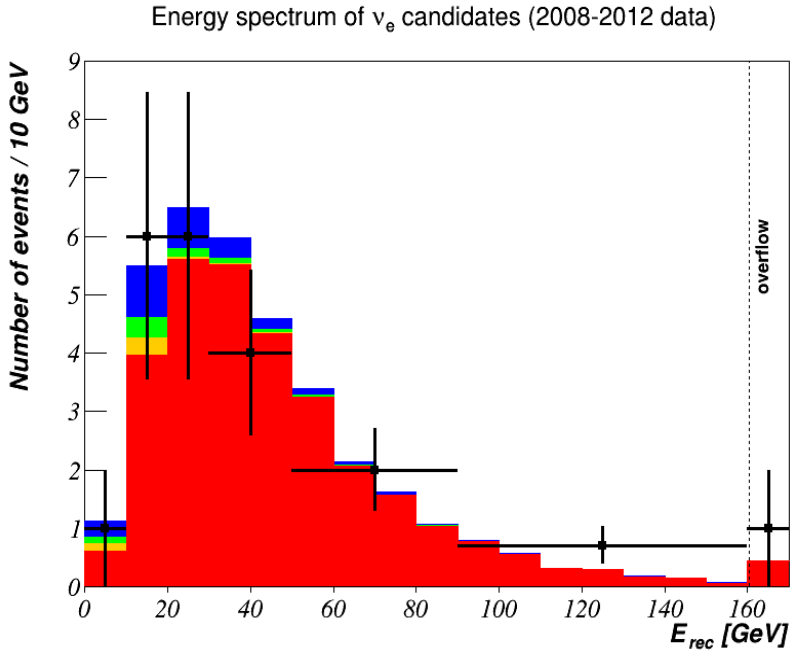
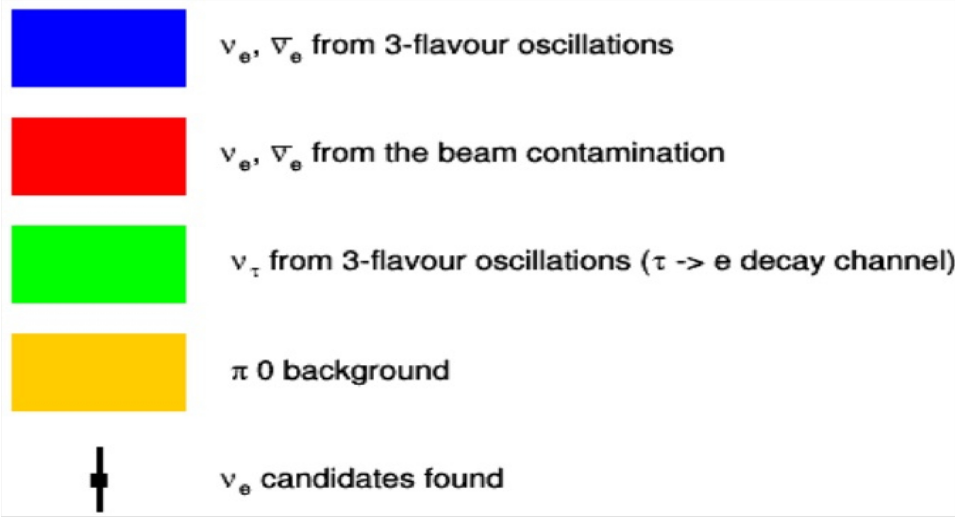
23/03/2017.
Update: 35 nue candidates found

In the attachment there are:

1) Energy plot (eps, png, pdf, jpg)
2) Legend to the energy plot (eps, png, pdf, jpg)
3) table with the expected BG, data for the different energy cuts (eps, png, jpeg, tex)



| Energy cut, GeV | 10 | 20 | 30 | 40 | 50 | No cut |
|---|---|---|---|---|---|---|
| $\nu_e$, $\bar{\nu}_e$ from the beam contamination | 0.6 | 4.6 | 10.2 | 15.7 | 20.0 | 30.8 |
| $\pi^0$ | 0.1 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 |
| $\nu_\tau$ from 3-flavour oscillations ($\tau \to e$ channel) | 0.1 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| Total expected BG | 0.8 | 5.5 | 11.3 | 16.9 | 21.3 | 32.2 |
| $\nu_e$, $\bar{\nu}_e$ from 3-flavour oscillations | 0.3 | 1.1 | 1.8 | 2.3 | 2.4 | 2.7 |
| Expected spectrum in case of 3 flavour oscillations | 1.1 | 6.6 | 13.1 | 19.2 | 23.7 | 34.9 |
| Data | 1 | 7 | 13 | 19 | 21 | 35 |

Expected and observed number of events for the different energy cuts.

31/03/2017 Update of the table with the upper limits and sensitivities on N_osc and P_mue (under assumption P_ee=1), 90% C.L.: the sytematic errors are evaluated in the way recommended at CM 21-22 March 2017 (for the beam contamination 20% below 10 GeV and 10% above 10 GeV, syst. Errors for other sourses are ignored). The 30 GeV cut is the best one in sense of sensitivity to P_mue.

| Energy cut | Upper limit $N_{osc}$ ($P_{\mu e}$, $P_{ee}=1$) | | Sensitivity $N_{osc}$ ($P_{\mu e}$, $P_{ee}=1$) | |
|---|---|---|---|---|
| | Bayes | F&C | Bayes | F&C |
| 10 GeV | 3.37 (0.0272) | 3.57 (0.0288) | 3.37 (0.0272) | 3.57 (0.0288) |
| 20 GeV | 6.75 (0.0061) | 7.26 (0.0066) | 5.81 (0.0053) | 5.98 (0.0054) |
| 30 GeV | 8.58 (0.0034) | 9.22 (0.0037) | 6.91 (0.0028) | 6.72 (0.0027) |
| 40 GeV | 10.01 (0.0037) | 11.10 (0.0037) | 8.62 (0.0032) | 8.60 (0.0028) |
| 50 GeV | 9.32 (0.0033) | 9.22 (0.0033) | 9.32 (0.0033) | 9.23 (0.0032) |
| No cut | 12.79 (0.0041) | 14.84 (0.0047) | 10.48 (0.0033) | 11.38 (0.0036) |