



Semi-leptonic decays form-factors

Vladimir Romanovsky
for
Oleg Yushchenko

Institute for High Energy Physics
Protvino
Russia

Publications

- High statistic study of the $K^- \rightarrow \pi^0 \mu^- \nu$ decay
 - ♦ hep-ex/0312004
 - ♦ Phys. Lett. B581 (2004) 31-38
- High statistic measurement of the $K^- \rightarrow \pi^0 e^- \nu$ decay form-factors
 - ♦ hep-ex/0404030
 - ♦ Phys. Lett. B589 (2004) 111-117

 K_{e3}

Parameter	Value	Parab. Error	Minos error -	Minos error +
-----------	-------	--------------	---------------	---------------

Fit with linear F+ form-factor

1	λ_+	2.77E-002	4.66E-004	-4.65E-004	4.66E-004
---	-------------	-----------	-----------	------------	-----------

Fit with quadratic F+ form-factor

1	λ_+	2.32E-002	1.52E-003	-1.52E-003	1.52E-003
2	λ'_+	8.44E-004	2.72E-004	-2.72E-004	2.71E-004

Parameter correlation coefficient

	GLOBAL	1	2
1	0.95	1	-0.95
2	0.95	-0.95	1

 K_3

Parameter	Value	Parab. Error	Minos error-	Minos error+
-----------	-------	--------------	--------------	--------------

Fit with quadratic F+ form-factor

1	λ_+	2.77E-002	1.31E-003	-1.31E-003	1.31E-003
2	λ_0	1.83E-002	1.08E-003	-1.08E-003	1.08E-003

Parameter correlation coefficient

GLOBAL	1	2
1	0.87	-0.87
2	0.87	-0.87



K_{e3} and K_3

Parameter	Value	Parab. Error	Minos error-	Minos error+
-----------	-------	--------------	--------------	--------------

Fit with linear form-factors.

1	λ_+	2.77E-002	4.39E-004	-4.38E-004	4.39E-004
2	λ_0	1.83E-002	1.02E-003	-1.02E-003	1.02E-003

Parameter correlation coefficient

	GLOBAL	1	2
1	0.46	1	-0.46
2	0.46	-0.46	1



K_{e3} and K_3

Parameter	Value	Parab. Error	Minos error-	Minos error+
-----------	-------	--------------	--------------	--------------

Fit with quadratic F+ form-factor

1	λ_+	2.31E-002	1.47E-003	-1.46E-003	1.47E-003
2	λ_0	1.66E-002	1.15E-003	-1.14E-003	1.15E-003
3	λ'_+	8.57E-004	2.61E-004	-2.61E-004	2.60E-004

Parameter correlation coefficient

GLOBAL	1	2	3	
1	0.95	1	-0.02	-0.94
2	0.48	-0.02	1	-0.15
3	0.95	-0.94	-0.15	1