

## Table of Contents by Result

<b>1</b>	<b>Heuristics.nb</b>
1.1	Derivation of the explicit expressions for $a, b, c, d, e, f, g, \bar{a}, \bar{b}, \bar{c}$ . . . . .
1.2	Derivation of the equation $\Phi(\lambda, y) = 0$ in the limit $\lambda \rightarrow 0$ . . . . .
<b>2</b>	<b>Proposition_3_2.nb</b>
2.1	Asymptotics of $J^{i,N}$ . . . . .
<b>3</b>	<b>Lemma_6_9.nb</b>
3.1	$\Phi_N(0, \delta_N^*) = 0$ has a unique root. . . . .
3.1.1	$P_N(y) = 0$ has only real roots. . . . .
3.1.2	$P_N(0) < 0$ . . . . .
3.1.3	$P_N\left(2N^2 \frac{N-1}{3N+1}\right) > 0$ . . . . .
3.2	$\partial_y \Phi_N(0, \delta_N^*) \neq 0$ . . . . .
<b>4</b>	<b>Lemma_A_2.nb</b>
4.1	Asymptotic expansions for $h_{4,1}$ , $h_{4,2}$ and $h_4^0$ . . . . .
4.2	$\delta_N^*$ is a root of $\chi_N(y) = 0$ . . . . .