1086-35-1914 **Farhod Abdullayev*** (farkhad.abdullaev@ndsu.edu), 1010 12TH Ave N, Apt 5, Fargo, ND 58102. *The asymptotic behavior of solutions to the Robin eigenvalue problem for the $p(x)$-Laplacian as $p(x) \to \infty$.*

We study the asymptotic behavior of the (first) eigenvalues and the corresponding eigenfunctions for the Robin problem for the $p(x)$-Laplacian:

$$\begin{cases} -\Delta_{p(x)} u = \Lambda |u|^{p(x)-2} u & \text{in } \Omega \\ |\nabla u|^{p(x)-2} \frac{\partial u}{\partial \eta} + \beta |u|^{p(x)-2} u = 0 & \text{on } \partial\Omega. \end{cases}$$

as $p(\cdot) \to \infty$. (Received September 24, 2012)