ASYMPTOTIC ANALYSIS IN THE BALL FOR ALMOST CRITICAL FULLY NONLINEAR ELLIPTIC EQUATIONS

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We will present recent results about the asymptotic behavior as $\epsilon \to 0$ of the solutions $u_\epsilon \geq 0$ of the Dirichlet problems

$$\begin{cases} -\mathcal{M}^{\pm}(D^2 u_\epsilon) = u_\epsilon^{p_\pm^* - \epsilon} & \text{in } B_1\,, \\ u_\epsilon = 0 & \text{on } \partial B_1\,, \end{cases}$$

where $p_\pm^*$ are the critical (radial) exponents for the Pucci's operators $\mathcal{M}^{\pm}$.

We will show how the solutions u_ϵ concentrate around their maximum point (the origin), while a suitably defined energy associated to the system remains invariant.

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