

# Imitating the Typography From Classic Hindawi Journals (i.e., from ‘Fixed Points as Nash Equilibria’ (Torres-Martínez, 2006))

Pachá (<https://pacha.dev>)

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This uses Computer Modern (TeX default).

Let  $Y \subset \mathbb{R}^n$  be a convex set. A function  $v : Y \rightarrow \mathbb{R}$  is *quasiconcave* if, for each  $\lambda \in (0, 1)$ , we have  $v(\lambda y_1 + (1 - \lambda)y_2) \geq \min\{v(y_1), v(y_2)\}$ , for all  $(y_1, y_2) \in Y \times Y$ .

[*Nash-2*.] Given  $\mathcal{G} = \{I, S_i, V^i\}$ , suppose each set  $S_i \in \mathcal{H}$  and that objective functions are continuous in its domain and *quasiconcave* in its own strategy. Then there is a Nash equilibrium for  $\mathcal{G}$ .

[*Kakutani*.] Given  $X \in \mathcal{H}$ , every closed-graph correspondence  $\Phi : X \rightrightarrows X$ , with  $\Phi(x) \in \mathcal{H}$  for all  $x \in X$ , has a fixed point, provided that  $\Phi(x) = \prod_{j=1}^m \pi_j^m(\Phi(x))$  for each  $x \in X \subset \mathbb{R}^m$ .

The article proves that  $[Nash-2] \rightarrow [Kakutani]$ .

Ok, sufficient display of math symbols.

See <https://github.com/pachadotdev/varsityblues> for a set of complete LaTeX templates to be used with R Markdown or Quarto.