YOSHIHIRO ABE. *Weakly normal filters and the closed unbounded filter on $P_\kappa\lambda$*. ***Proceedings of the American Mathematical Society***, vol. 104 (1988), pp. 1226–1234.

YOSHIHIRO ABE. *Weakly normal filters and large cardinals*. ***Tsukuba journal of mathematics***, vol. 16 (1992), pp. 487–494.

YOSHIHIRO ABE. *Weakly normal ideals on $\mathcal{P}_\kappa\lambda$ and the singular cardinal hypothesis*. ***Fundamenta mathematicae***, vol. 143 (1993), pp. 97–106.

YOSHIHIRO ABE. *Saturation of fundamental ideals on $\mathcal{P}_\kappa\lambda$*. ***Journal of the Mathematical Society of Japan***, vol. 48 (1996), pp. 511–524.

YOSHIHIRO ABE. *Strongly normal ideals on $\mathcal{P}_\kappa\lambda$ and the Sup-function*. ***Topology and its applications***, vol. 74 (1996), pp. 97–107.

YOSHIHIRO ABE. *Combinatorics for small ideals on $\mathcal{P}_\kappa\lambda$*. ***Mathematical logic quarterly***, vol. 43 (1997), pp. 541–549.

YOSHIHIRO ABE and MASAHIRO SHIOYA. *Regularity of ultrafilters and fixed points of elementary embeddings*. ***Tsukuba journal of mathematics***, vol. 22 (1998), pp. 31–37.

Throughout this review, κ will denote a regular uncountable cardinal and λ a cardinal $> \kappa$. $P_\kappa\lambda$ is the collection of all subsets of λ of size $< \kappa$. As a convenient convention, the phrase "ideal on $P_\kappa\lambda$" will mean "proper, κ-complete, fine ideal on $P_\kappa\lambda$."

Since the formulation of the concept of supercompactness by Reinhardt and Solovay in the late sixties, much work has gone into an investigation of the properties of individual ideals on $P_\kappa\lambda$. Nevertheless, as pointed out by Kanamori in ***The higher infinite***, p. 351 (JSL LXI 334), for ideals on $P_\kappa\lambda$ "a full structure theory has yet to be worked out." The seven papers under review represent a selection of Abe's results in this area.

Suppose κ is λ-supercompact. Menas (*A combinatorial property of $p_\kappa\lambda$*, JSL LVI 1098) showed that if λ is a strong limit cardinal of cofinality $< \kappa$, then $P_\kappa\lambda$ bears two distinct isomorphic prime ideals extending the non-stationary ideal $\mathrm{NS}_{\kappa\lambda}$. In the first paper the author proves that the conclusion still holds if λ is inaccessible.

The remainder of the paper and the next two papers are concerned with Kanamori ideals. An ideal J on $P_\kappa\lambda$ is *Kanamori* if for every regressive $f : P_\kappa\lambda \to \lambda$, there exist $B \in J^*$ and $\gamma < \lambda$ such that $f(b) \leqq \gamma$ for every $b \in B$. (The corresponding property for ideals on κ was studied by Kanamori in *Weakly normal filters and irregular ultrafilters*, ***Transactions of the American Mathematical Society***, vol. 220 (1976), pp. 393–399, whence the name). J is *weakly normal* if given $A \in J^+$ and a regressive $f : P_\kappa\lambda \to \lambda$, there exist $B \in J^+ \cap P(A)$ and $\gamma < \lambda$ such that $f(b) \leqq \gamma$ for every $b \in B$. The two notions appear in the literature under various names. Abe himself varies in his terminology. By a "weakly normal ideal" he means what I call a Kanamori ideal in the second paper and what I call a weakly normal ideal in the fifth one. Note that the concept of weak normality is useless if $\mathrm{cf}(\lambda) < \kappa$, since then *every* ideal on $P_\kappa\lambda$ is weakly normal. Also, the two notions coincide if J is prime : J is Kanamori iff it is weakly normal. More generally, as shown by Abe in the third paper, an ideal J on $P_\kappa\lambda$ is Kanamori iff it is weakly normal and every disjoint family of sets in J^+ has size $< \mathrm{cf}(\lambda)$.

In the first paper only *prime* Kanamori ideals are considered. There the author makes the simple but crucial observation that every prime ideal on $P_\kappa\lambda$ has a prime Kanamori ideal below it in the RK-ordering. Thus there always exists a prime Kanamori ideal on $P_\kappa\lambda$ in case κ is λ-compact. It is also shown that if κ is a measurable limit of supercompact cardinals and λ is regular, then there is a prime Kanamori ideal J on $P_\kappa\lambda$ that is RK-minimal but does not extend $\mathrm{NS}_{\kappa\lambda}$ (in fact $\{a \in P_\kappa\lambda : a \cap \kappa \in \kappa\} \in J$).

The second paper is concerned with existence of Kanamori ideals. Let $K_{\kappa\lambda}$ assert the existence of a Kanamori ideal on $P_\kappa\lambda$. Abe's first observation is that $K_{\kappa\lambda}$ implies that κ is a limit cardinal. He goes on to establish that if $K_{\kappa\lambda}$ holds and either $2^{<\mathrm{cf}(\lambda)} < \kappa$ or $\mathrm{cf}(\lambda) = \kappa$, κ is inaccessible, and there is no Suslin κ-tree, then κ is λ-compact. Finally, he shows that these results are sharp by establishing the consistency of the following three statements (relative