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Recent Dark Matter related searches with the $BABAR$ detector.

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We present the most recent $BABAR$ searches for Dark-matter states with masses below the electroweak scale.The results are based on the full data set of about 470 fb^{-1} collected at the $\Upsilon(4S)$ resonance by the $BABAR$ detector at the PEP-II collider.
They include, in particular, a search for decays like $B^0 \to \psi_D calB$ where
$calB$ is a baryon (proton, Λ, or Λ_c), which produce the dark matter particle (ψ_D) and baryogenesis simultaneously. The hadronic recoil method has been applied with one of the B mesons from $\Upsilon(4S)$ decay fully reconstructed, while only one baryon is present in the signal B-meson side. The missing mass of signal B meson is considered as the mass of the dark particle ψ_D. Stringent upper limits on the decay branching fraction are derived in the energy region between 0.5 and 4.2 GeV/c^2.

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