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Search for New Hadronic States  $W_{bj}$  in Belle data NICHOLAS COR-RADO, VLADIMIR SAVINOV, Univ of Pittsburgh, BELLE COLLABORATION — Recent discovery of  $Z_b$  states at the Belle experiment implies possible existence of a new family of hadronic resonances including molecular states dubbed  $W_{bj}$ . We search for these states in radiative decays of  $\Upsilon(5S)$  resonance in data collected with the Belle detector at the KEKB asymmetric-energy electron-positron collider. No such additional hadronic states in the  $Z_b$  family have been observed yet. We use Monte Carlo simulation to study Belle sensitivity to  $W_{bj}$  production. We report the current status of our investigations to provide the best sensitivity to this decay in the existing data and to create a roadmap for future discovery.

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