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Bio

STANFORD ADVISORS

- Lance Dixon, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Sunset integrals with up to three mass scales in chiral perturbation theory: a comparative study of the Mellin-Barnes representation technique** *EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS*
Ananthanarayan, B., Banik, S., Bernard, V., Friot, S., Ghosh, S., Meissner, U.
2026
- **Two-loop anomalous dimensions for baryon-number-violating operators in SMEFT** *JOURNAL OF HIGH ENERGY PHYSICS*
Banik, S., Crivellin, A., Naterop, L., Stoffer, P.
2026
- **Some topics concerning the standard model, Feynman integrals and renormalization group methods: a review of some recent investigations and results** *EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS*
Ananthanarayan, B., Banik, S., Bera, S., Das, A. B., Datta, S., Friot, S., Ghosh, S., Khan, M., Pathak, T., Sarkar, R., Wyler, D.
2026; 234 (26): 8005-8054
- **Correlating $A \rightarrow \gamma\gamma$ with electric dipole moments in the two Higgs doublet model in light of the diphoton excesses at 95 GeV and 152 GeV** *PHYSICAL REVIEW D*
Banik, S., Coloretti, G., Crivellin, A., Haber, H. E.
2025; 111 (7)
- **Explanation of the excesses in associated di-photon production at 152 GeV in 2HDM** *JOURNAL OF HIGH ENERGY PHYSICS*
Banik, S., Crivellin, A.
2024