SAMPLE OUTPUT - RAG

<<<< Focus Mode: TECHNICAL >>>>

<<<< Title: Two-proton radioactivity and three-body decay. IV. Connection to quasiclassical formulation >>>>

<<<< Original Abstract (81 words):
We derive quasiclassical expressions for the three-body decay width and define the ``preexponential'' coefficients for them. The derivation is based on the integral formulae for the three-body width obtained in the semianalytical approach with simplified three-body Hamiltonian [L.V. Grigorenko and M...

<<>> Generated Summary (46 words, 1.8x compression):
This document is based on a quasiclassical formulation. The model is applied to the decays of the firstexcited state of Ne and the ground state of Fe. The qualitative aspects of the model and relations with the other simpler approaches to the three-body decays are discussed.

Some weights of RobertaModel were not initialized from the model checkpoint at roberta-large and are newly initialized: ['pooler.dense.bias', 'pooler.dense.weight']
You should probably TRAIN this model on a down-stream task to be able to use it for predictions and inference.

<<<>>> Evaluation Scores (vs abstract excerpt): <<<>>>
ROUGE-1: 0.269
ROUGE-2: 0.070
ROUGE-L: 0.239
BERTScore F1: 0.839

<<<< Focus Mode: NOVELTY >>>>

<<<< Title: Two-proton radioactivity and three-body decay. IV. Connection to

quasiclassical formulation >>>>

<<<< Original Abstract (81 words):
We derive quasiclassical expressions for the three-body decay width and define the ``preexponential'' coefficients for them. The derivation is based on the integral formulae for the three-body width obtained in the semianalytical approach with simplified three-body Hamiltonian [L.V. Grigorenko and M...

<<>> Generated Summary (51 words, 1.6x compression):
We derive quasiclassical expressions for the three-body decay width anddefine the coefficients for them. The model is applied to the decays of the first excited state of Ne and ground state of Fe. The qualitative aspects of the model and relations with the othersimplified approaches to the 3-body decays are discussed.

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<<<>>> Evaluation Scores (vs abstract excerpt): <<<>>>
ROUGE-1: 0.423
ROUGE-2: 0.242
ROUGE-L: 0.394
BERTScore F1: 0.860

<<<< Focus Mode: APPLICATIONS >>>>

<<<< Title: Two-proton radioactivity and three-body decay. IV. Connection to quasiclassical formulation >>>>

<<<< Original Abstract (81 words):
We derive quasiclassical expressions for the three-body decay width and define the ``preexponential'' coefficients for them. The derivation is based on the integral formulae for the three-body width obtained in the semianalytical approach with simplified three-body Hamiltonian [L.V. Grigorenko and M...

<<<>>> Generated Summary (52 words, 1.6x compression):
This document is based on the following context: Two-proton radioactivity and three-body decay. The model is applied to the decays of the firstexcited state of Ne and the ground state of Fe. The derivation isbased on the integral formulae for the three- body width obtained in the semianalyticalapproach with simplified three-Body Hamiltonian.

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You should probably TRAIN this model on a down-stream task to be able to use it for predictions and inference.

<<<>>> Evaluation Scores (vs abstract excerpt): <<<>>>
ROUGE-1: 0.480
ROUGE-2: 0.280
ROUGE-L: 0.480
BERTScore F1: 0.856

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<<<< CATEGORY 2: HEP-TH ASTRO-PH GR-QC >>>>

<<<< Focus Mode: GENERAL >>>>

<<<< Title: Curvature and isocurvature perturbations in two-field inflation >>>>

<<<< Original Abstract (87 words):
We study cosmological perturbations in two-field inflation, allowing for non-standard kinetic terms. We calculate analytically the spectra of curvature and isocurvature modes at Hubble crossing, up to first order in the slow-roll parameters. We also compute numerically the evolution of the curvature...

<<>> Generated Summary (53 words, 1.6x compression):

We study cosmological perturbations in two-field inflation, allowing for non-standard kinetic terms. We calculate analytically the spectra of curvature and isocurvature modes at Hubble crossing, up to first order in the slow-roll parameters. We also compute numerically the evolution of the curvature from well within the Hubble radius until the end of inflation.

Some weights of RobertaModel were not initialized from the model checkpoint at roberta-large and are newly initialized: ['pooler.dense.bias', 'pooler.dense.weight']
You should probably TRAIN this model on a down-stream task to be able to use it for predictions and inference.

<<<>>> Evaluation Scores (vs abstract excerpt): <<<>>>
ROUGE-1: 1.000
ROUGE-2: 0.981
ROUGE-L: 1.000
BERTScore F1: 0.957

<<<< Focus Mode: TECHNICAL >>>>

<<<< Title: Curvature and isocurvature perturbations in two-field inflation >>>>

<<<< Original Abstract (87 words):
We study cosmological perturbations in two-field inflation, allowing for non-standard kinetic terms. We calculate analytically the spectra of curvature and isocurvature modes at Hubble crossing, up to first order in the slow-roll parameters. We also compute numerically the evolution of the curvature...

<<>> Generated Summary (56 words, 1.6x compression):
Study cosmological perturbations in two-field inflation. We calculate analytically the spectra of curvature and isocurvature modes at Hubble crossing, up to first order in the slow-rollparameters. We show explicitly for a few examples, including the recently proposed model of `roulette' inflation, how isocURvature perturbation affect the curvature perturbed between Hubble crossing and the end of inflation.

Some weights of RobertaModel were not initialized from the model checkpoint at roberta-large and are newly initialized: ['pooler.dense.bias', 'pooler.dense.weight']

You should probably TRAIN this model on a down-stream task to be able to use it for predictions and inference.

<<<>>> Evaluation Scores (vs abstract excerpt): <<<>>>
ROUGE-1: 0.588
ROUGE-2: 0.467
ROUGE-L: 0.565
BERTScore F1: 0.913
