## Design of a drift chamber for an experiment at FCC-ee for IEEE Conferences

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Abstract—The physics aims at the electron positron option for the Future Circular Collider (FCCee) impose high precision requirements on the vertex and tracking detectors. The detector has also to match the experimental conditions such as the collisions rate and the presence of beam-induced backgrounds. A light weight tracking detector is under investigation for the IDEA (International Detector for Electron-Positron Accelerator) detector concept and consists of a drift chamber. Simulation studies of the drift chamber using the FCCSW (FCC software) are presented. Full simulations are used to study the effect of beam-induced backgrounds on such detector.

## I. INTRODUCTION

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II. CONCLUSION

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## REFERENCES

 H. Kopka and P. W. Daly, A Guide to <u>MTEX</u>, 3rd ed. Harlow, England: Addison-Wesley, 1999.