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Precision fragmentation function measurements at Belle MARTIN LEITGAB, UIUC, BELLE COLLABORATION — In order to precisely measure the gluon polarization in inclusive hadron production at RHIC and in semi-inclusive DIS good knowledge of the unpolarized fragmentations is necessary. As most of the world data on fragmentation functions has been obtained at LEP energies, especially the gluon fragmentation function is poorly known. The Belle experiment at KEKB in Japan has a large amount of data from which fragmentation functions can be extracted at relatively low scale with high precision. In addition also spin dependent fragmentation functions, such as the Collins function and the interference fragmentation functions are important to extract the transverse quark spin polarization at RHIC and in semi-inclusive DIS. The current status of the analysis will be presented.

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